

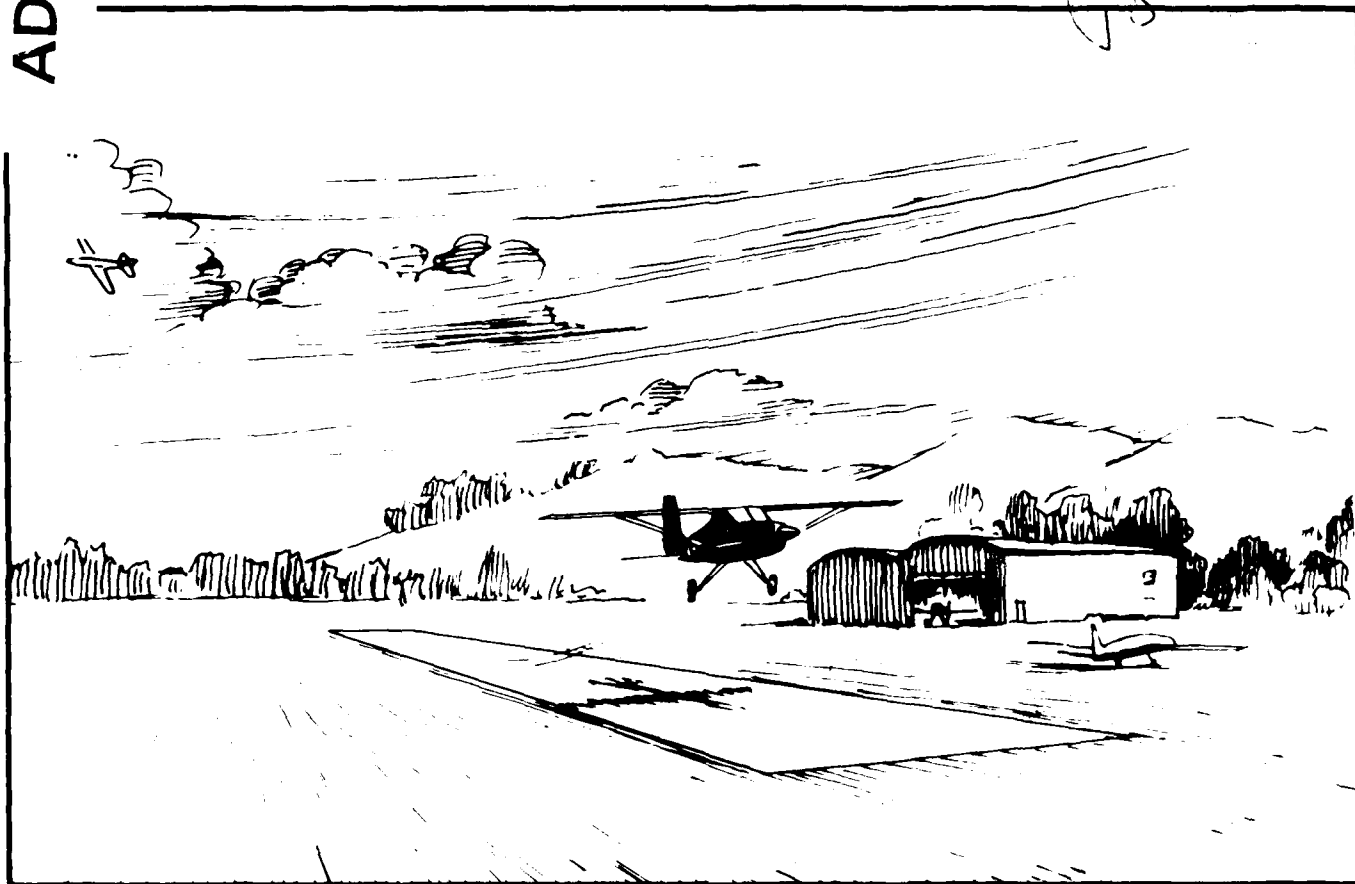


US Department  
of Transportation  
Federal Aviation  
Administration

# General Aviation Activity and Avionics Survey

AD-A168 582

## Annual Summary Report 1984 Data



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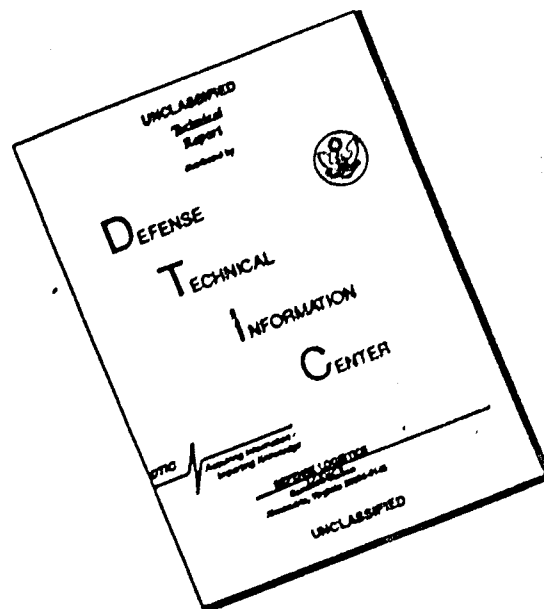
October 1985

Report No. FAA-MS-85-5  
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Office of Management Systems  
Information and Statistics Division

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16 Abstract  <p>This report presents the results and a description of the 1984 General Aviation Activity and Avionics Survey. The survey was conducted during 1985 by the FAA to obtain information on the activity and avionics of the United States registered general aviation aircraft fleet, the dominant component of civil aviation in the U.S. The survey was based on a statistically selected sample of about 12.7 percent of the general aviation fleet. A response rate of 59.5 percent was obtained. Survey results are based upon responses but are expanded upward to represent the total population.</p> <p>Survey results revealed that during 1984 an estimated 36.1 million hours of flying time were logged by the 220,943 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 158 hours. The active aircraft represented about 82.6 percent of the registered general aviation fleet. The report contains breakdowns of these and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Also included are fuel consumption, lifetime airframe hours, avionics, and engine hours estimates. In addition, tables are included for detailed analysis of the avionics capabilities of the general aviation fleet. Estimates of general aviation miles flown in 1984 have also been included in this report, broken down by aircraft type.</p>			
17 Key Words <b>Aircraft, Aircraft Activity, Aircraft Use, Avionics, Fuel Consumption, General Aviation, Hours Flown, Miles Flown</b>		18 Distribution Statement  <b>DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD VIRGINIA 22161</b>	
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## PREFACE

This report presents the results of the 1984 General Aviation Activity and Avionics Survey. The survey is the continuation of an FAA data collection program to gain information on the activities and avionics equipment of the general aviation aircraft fleet. The results represent the cumulative effort of several agencies within the Department of Transportation. Within the FAA, the Information and Statistics Division sponsored and coordinated the activities associated with the survey. The Transportation Systems Center (TSC), under Project Plan Agreement with the FAA, and with contract support from the Systems Development Corporation, developed the sample design and computer system for sample selection, data editing and estimation of results, ran the system during survey production, analyzed survey results, and prepared the survey report. TSC transferred the survey responses to machine readable forms and was also responsible for printing names, addresses, and aircraft information on the survey questionnaires. DYNATREND, Incorporated produced the camera-ready copy of this report.

Individual contributions to this survey include: Nicholas Soldo and Patricia Carter, AMS-420, who sponsored the project and reviewed the results; Donald Wright, TSC, who guided the project and reviewed the output; Judith Schwenk, TSC, who developed the computer specifications; Bruce Rovner, TSC, who managed the survey operations; Steve Wainshaw and Tina Aiello, TSC, who reviewed and updated the text; Marilyn Marotta, Ken Paciulan and James Egan of Systems Development Corporation, who revised the computer programs for the 1984 survey and performed the production runs to produce the estimates contained in this report; and James Kelley and Betsy Marden, of DYNATREND, Incorporated, who provided editorial support and redesigned the graphics.

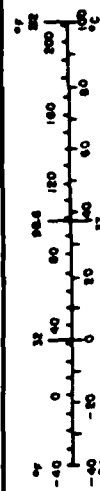
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# METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures				Approximate Conversions from Metric Measures			
Symbol	When You Know	Multiply by	To Find	Symbol	When You Know	Multiply by	To Find
<b>LENGTH</b>				<b>LENGTH</b>			
in	inches	2.5	centimeters	cm	centimeters	0.04	inches
ft	feet	30	centimeters	cm	centimeters	0.4	inches
y	yards	0.9	meters	m	meters	3.3	feet
mi	miles	1.6	kilometers	km	kilometers	1.1	yards
						0.6	miles
<b>AREA</b>				<b>AREA</b>			
sq in	square inches	6.5	square centimeters	sq cm	square centimeters	0.16	square inches
sq ft	square feet	0.09	square meters	sq m	square meters	1.2	square yards
sq yd	square yards	0.8	square meters	sq m	square kilometers	0.4	square miles
sq mi	square miles	2.6	square kilometers	sq km	hectares (10,000 m <sup>2</sup> )	2.5	acres
acre	acres	0.4	hectares	ha			
<b>MASS (weight)</b>				<b>MASS (weight)</b>			
oz	ounces	29	grams	g	grams	0.035	ounces
lb	pounds	0.45	kilograms	kg	kilograms	2.2	pounds
short ton (2,000 lb)	short tons	0.9	tonnes	t	tonnes (1,000 kg)	1.1	short tons
<b>VOLUME</b>				<b>VOLUME</b>			
cup	cup	6	milliliters	ml	milliliters	0.03	fluid ounces
pt	pint	16	milliliters	ml	liters	2.1	pints
qt	quart	32	milliliters	ml	liters	1.06	quarts
gal	gallon	0.24	liters	l	liters	0.26	gallons
qt	quart	0.97	liters	l	liters	26	cubic feet
gal	gallon	0.96	liters	l	liters	1.3	cubic yards
cu ft	cubic feet	2.9	liters	m <sup>3</sup>	cubic meters		
cu yd	cubic yards	0.83	cubic meters	m <sup>3</sup>	cubic meters		
		0.76	cubic meters	m <sup>3</sup>			
<b>TEMPERATURE (exact)</b>				<b>TEMPERATURE (exact)</b>			
Fahrenheit temperature	5/9 (Fahr subtracting 32)		Celsius temperature	Celsius temperature	9/5 (then add 32)		Fahrenheit temperature



## EXECUTIVE SUMMARY

This report presents the results of the eighth General Aviation Activity and Avionics Survey, conducted in 1985 by the Federal Aviation Administration to obtain information on the activities and avionics of the 1984 general aviation aircraft fleet, the major component of civil aviation in the United States. The FAA selected a statistically designed sample of about 12.7 percent of the registered general aviation fleet to participate in the survey. The sampled aircraft represented all states and FAA regions, and all of the major manufacturer/model groups of aircraft. The survey was conducted through a mailed questionnaire, yielding in total a response rate of 59.5 percent.

Some important survey findings appear below:

- An estimated 36.1 million hours of flying time were logged by the 220,943 active general aviation aircraft in the U.S. fleet during 1984. There was a 3.6 percent increase in the number of active aircraft from 1983 to 1984. The active aircraft had a mean flight time per aircraft of 158 hours and represented about 82.6 percent of the registered general aviation fleet.
- Turboprop and turbojet aircraft averaged a greater number of flight hours per aircraft than other aircraft types with 414 hours and 353 hours, respectively. Twin engine turboprops with 13 or more seats flew almost 1112 hours per aircraft. In contrast, single engine piston powered aircraft with fewer than four seats averaged approximately 140 hours.
- The most common primary use of general aviation aircraft was personal for an estimated 48 percent of the active fleet, followed by business for 21 percent of the fleet, and executive for 8 percent of the fleet.
- The most populous region in terms of based aircraft was the Great Lakes Region, which housed an estimated 18 percent of all registered general aviation aircraft, followed closely by the Western-Pacific Region with 17.2 percent. The most populous state was California, which housed 13.6 percent of the registered aircraft.
- About 84 percent of the general aviation aircraft had two-way VHF communication equipment, about 64 percent were equipped with 4096-code transponders, about 56 percent had at least one component of an instrument landing system, and about 79 percent had some form of navigation equipment.
- An estimated 25.5 percent of general aviation aircraft had avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 67.5 percent of the GA fleet could not fly above 12,500 feet due to avionics limitations alone.

- An estimated 41 percent of the active general aviation fleet flew by instrument flight rules (IFR) at some time during 1984.
- About 77 percent of the total hours logged by the 1984 general aviation fleet were flown in visual meteorological (VM) conditions during the day. Aircraft flown in VM night, instrument meteorological (IM) day, and IM night conditions accounted for 11 percent, 9 percent, and 3.5 percent of the total hours flown, respectively.
- The general aviation aircraft fleet consumed an estimated 1,201 million gallons of fuel during 1984: 462 million gallons of aviation gasoline and 739 million gallons of jet fuel.
- The general aviation aircraft fleet flew an estimated 4,393 billion air miles during 1984.

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## 1. INTRODUCTION

### 1.1 GENERAL

#### 1.1.1 Purpose of Survey

The purpose of the General Aviation Activity and Avionics Survey is to provide the Federal Aviation Administration (FAA) with information on the activity and avionics of the general aviation fleet. Figure 1.1 underscores the importance of general aviation to the United States civil air fleet. During calendar year 1984, general aviation composed over 98 percent of the U.S. civil air fleet<sup>1</sup>, accounted for 77 percent of civil operations at FAA towered airports<sup>2</sup>, and logged 78.8 percent of the total hours flown by the U.S. civil air fleet<sup>3</sup>. The information obtained from the survey enables the FAA to monitor the general aviation fleet so that it can, among other activities, anticipate and meet demand for National Airspace System facilities and services, assess the impact of regulatory changes on the general aviation fleet, and implement measures to assure the safe operation in the airspace of all aircraft.

#### 1.1.2 Background

Prior to the current survey method, the FAA used the Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73, in its data collection program on general aviation activity and avionics. The form, sent annually to all owners of civil aircraft in the U.S., served two purposes: (1) Part 1 was the mandatory aircraft registration renewal form, (2) Part 2 was voluntary and applied to general aviation aircraft only, asking questions on the owner-discretionary characteristics of the aircraft such as flight hours, avionics equipment, base location, and use. In 1978, the FAA replaced AC Form 8050-73 with a new system: Part 1 was replaced by a triennial registration program; Part 2 was replaced by the General Aviation Activity and Avionics Survey, FAA Form 1800-54. (See Appendix A.3.) The survey was to be conducted annually based on a statistically selected sample of general aviation aircraft, requesting the same type of information as Part 2 of AC Form 8050-73. The first General Aviation Activity and Avionics Survey took place in 1978, collecting data on the 1977 general aviation fleet. The 1984 statistics in this report were derived from the eighth survey, which took place in 1985. Benefits resulting from the new method of data collection included quicker processing of the results, improved data quality, and a considerable savings in time and money to both the public and the Federal Government.

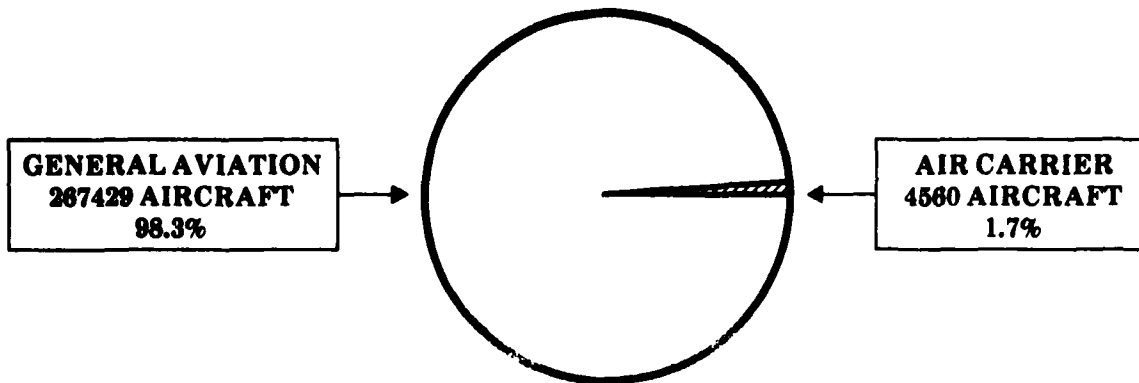
<sup>1</sup>Census of U.S. Civil Aircraft, Calendar Year 1984, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1985), p. 4.

<sup>2</sup>FAA Air Traffic Activity, Fiscal Year 1984, Federal Aviation Administration, (Washington, DC, 1985).

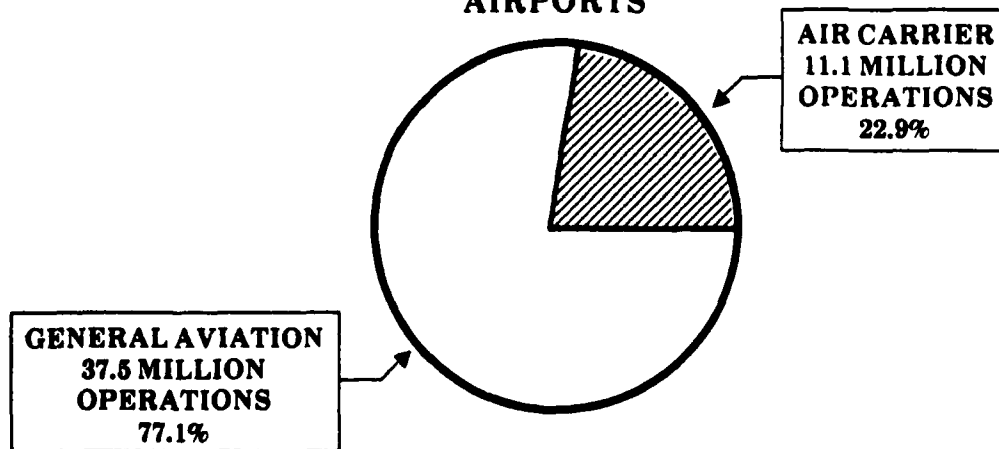
Note: General aviation as used in this report combines both general aviation and air taxi from the source above.

<sup>3</sup>Air Carrier: Census of U.S. Civil Aircraft, Calendar Year 1984, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1985), p. 21. General Aviation: Table 2.4

### U.S. CIVIL AIR FLEET



### CIVIL OPERATIONS AT FAA TOWERED AIRPORTS



### FLYING TIME

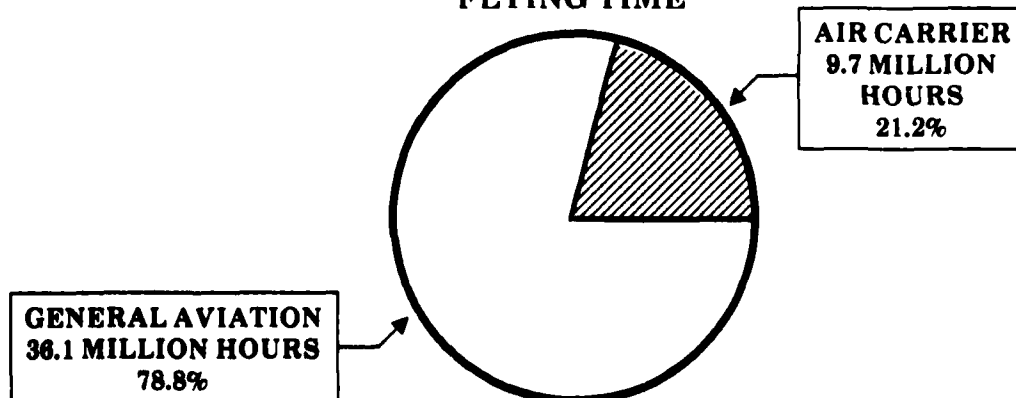


FIGURE 1.1. A COMPARISON OF GENERAL AVIATION AND  
AIR CARRIER ACTIVITY IN 1984

## 1.2 SURVEY COVERAGE

### 1.2.1 Aircraft

The General Aviation Activity and Avionics Survey covers, through a stratified probability sample, all general aviation aircraft registered in the United States. The term "general aviation," as used for this survey, is defined as all aircraft in the U.S. civil air fleet except those operated under Federal Aviation Regulations Parts 121 and 127. These two parts cover the operations of fixed wing aircraft and rotorcraft, respectively, that 1) have been issued a certificate of public convenience and necessity by the Civil Aeronautics Board authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations, and 2) are used by large aircraft commercial operators. General aviation thus includes aircraft operated under:

Part 91: General operating and flight rules.

Part 123: Certification and operations: air travel clubs using large airplanes.

Part 133: Rotorcraft external load operations.

Part 135: Air taxi operators and commercial operators of small aircraft.

Part 137: Agricultural aircraft operations.

General aviation offers such varied services as air taxi, air cargo, industrial, agricultural, business, personal, instructional, research, patrol, and sport flying. General aviation aircraft range in complexity from simple gliders and balloons to four engine turbojets.

Certain aircraft meeting the general aviation criteria have been excluded from the survey. This group consists of aircraft registered to dealers, aircraft in the process of being sold or with registration pending, and aircraft for which not enough information was available to categorize them properly for sampling purposes.

### 1.2.2 Geographic

The sample survey conducted by the FAA covers general aviation aircraft registered with the United States Aircraft Registry as of December 31, 1984. Over 99 percent of these aircraft are registered to owners living in the 50 states and Washington, D.C., with about 0.20 percent (560 aircraft) registered in Puerto Rico and other U.S. territories, and 0.72 percent (1918 aircraft) registered to owners living in foreign countries.<sup>1</sup>

### 1.2.3 Content

Appendix A.3 contains a copy of the survey questionnaire, FAA Form 1800-54. The questionnaire requests the owner to provide the following information on the sampled aircraft's characteristics and uses for various periods:

<sup>1</sup>Source: FAA Aircraft Registration Master File as of December 31, 1984.

- 1) Hours by use, IFR hours, percentage of hours flown in Instrument Meteorological (IM) and Visual Meteorological (VM) conditions during the day and evening, and fuel consumption for entire calendar year 1984,
- 2) Airframe hour reading and location of aircraft base as of December 31, 1984, and
- 3) Avionics equipment currently on board.

### 1.3 SURVEY METHOD

The method of collecting data used by the FAA for this survey was the mail questionnaire, sent to the owners of the sampled aircraft in two mailings. The first mailing in April, 1985, covered all 33,996 aircraft in the sample and had a response rate of 47.6 percent as shown in Table 1-1. This was about 80 percent of the total responses to the survey. The second mailing conducted in May, 1985, included only those aircraft in the sample that had not yet responded. The second mailing had a response rate of 22.6 percent which accounted for 20 percent of the total responses to the survey. The combined response rate for the two mailings was 59.5 percent.

**TABLE 1-1. SUMMARY OF RESPONSE INFORMATION  
BY SURVEY PHASE**

SURVEY PHASE	SAMPLE SIZE (S)	NUMBER OF RESPONSES (R)	RESPONSE RATE (R/S X 100%)	PORTION OF TOTAL RESPONSE (R/(TOTAL R) X 100%)
FIRST MAILING	33,996	16,185	47.6%	80%
SECOND MAILING	17,811	4,033	22.6%	20%
TOTAL	33,996	20,218	59.5%	100%

## 1.4 SUMMARY OF SURVEY RESULTS

### 1.4.1 National Scene

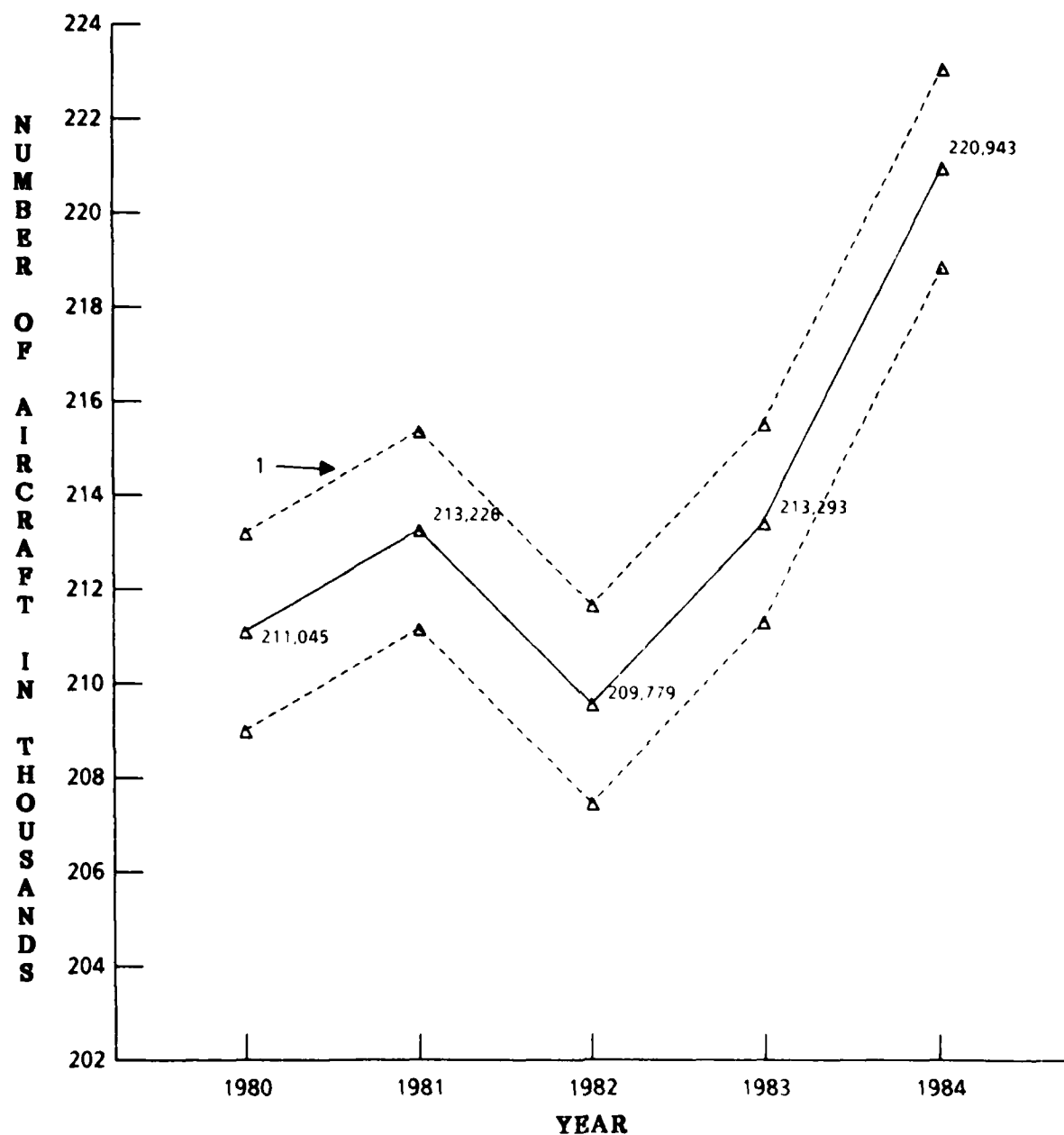
Results of the General Aviation Activity and Avionics Survey at the national level revealed that during 1984 an estimated 36.1 million hours of flying time were logged by the 220,943 active general aviation aircraft in the U.S. fleet. The mean annual flight time per aircraft was 158 hours. These aircraft comprised 82.6 percent of the registered general aviation fleet. The statistics for 1984 showed a 2.5 percent increase in flying hours, a 3.6 percent increase in the number of active aircraft in the general aviation fleet, and a 3.7 percent decrease in mean hours per aircraft over the comparable figures for 1983. Longer-term trends for these variables are found in Figures 1.2, 1.3, and 1.4. In past years, as the number of active aircraft has increased, the other activity measures have shown a steady decrease. In 1984, while the number of active aircraft has continued to increase and the mean hours per aircraft continued to decrease, the total hours flown showed a slight increase over 1983. The increase in total hours did not result in an increase in mean hours flown per aircraft because the increase in the number of active aircraft more than offset the increase in total hours flown.

While results discussed above indicate certain trends in the number of active aircraft, the activity of the general aviation fleet (total hours flown) and the average hours flown per active aircraft, year to year changes may not be statistically significant. An examination of the standard errors and confidence intervals for the chosen level of confidence is needed to determine statistical significance (change not due to sampling variances). Figures 1.2, 1.3, and 1.4 give the confidence intervals estimates over several years at the 95 percent level of confidence ( $\pm$  two standard errors).

### 1.4.2 Results by Aircraft Type

The most heavily used aircraft types were fixed wing turboprops with 13 or more seats, averaging over 1100 hours per aircraft, because of their heavy commercial usage as commuter air carriers and air taxis. There was a great deal of variation in activity among all types of general aviation aircraft in terms of three measures resulting from the survey: total hours flown, number of active aircraft, and mean hours flown. Figure 1.5 highlights the variation as well as the relationship of these three measures to each other. Distance along the vertical axis indicates mean flight hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet belonging to each aircraft type, and the area within each box is proportional to the total flying time for the aircraft type. Thus, it is evident that in terms of sheer numbers, single engine piston aircraft dominated the active fleet and contributed the largest portion of total flying time, yet had one of the lowest mean flight times per aircraft. In contrast, the turboprops, turbojet aircraft, and rotorcraft had low representation in the active fleet but contributed a relatively high proportion of flight time resulting in the greatest mean flight hours of any of the major aircraft types.

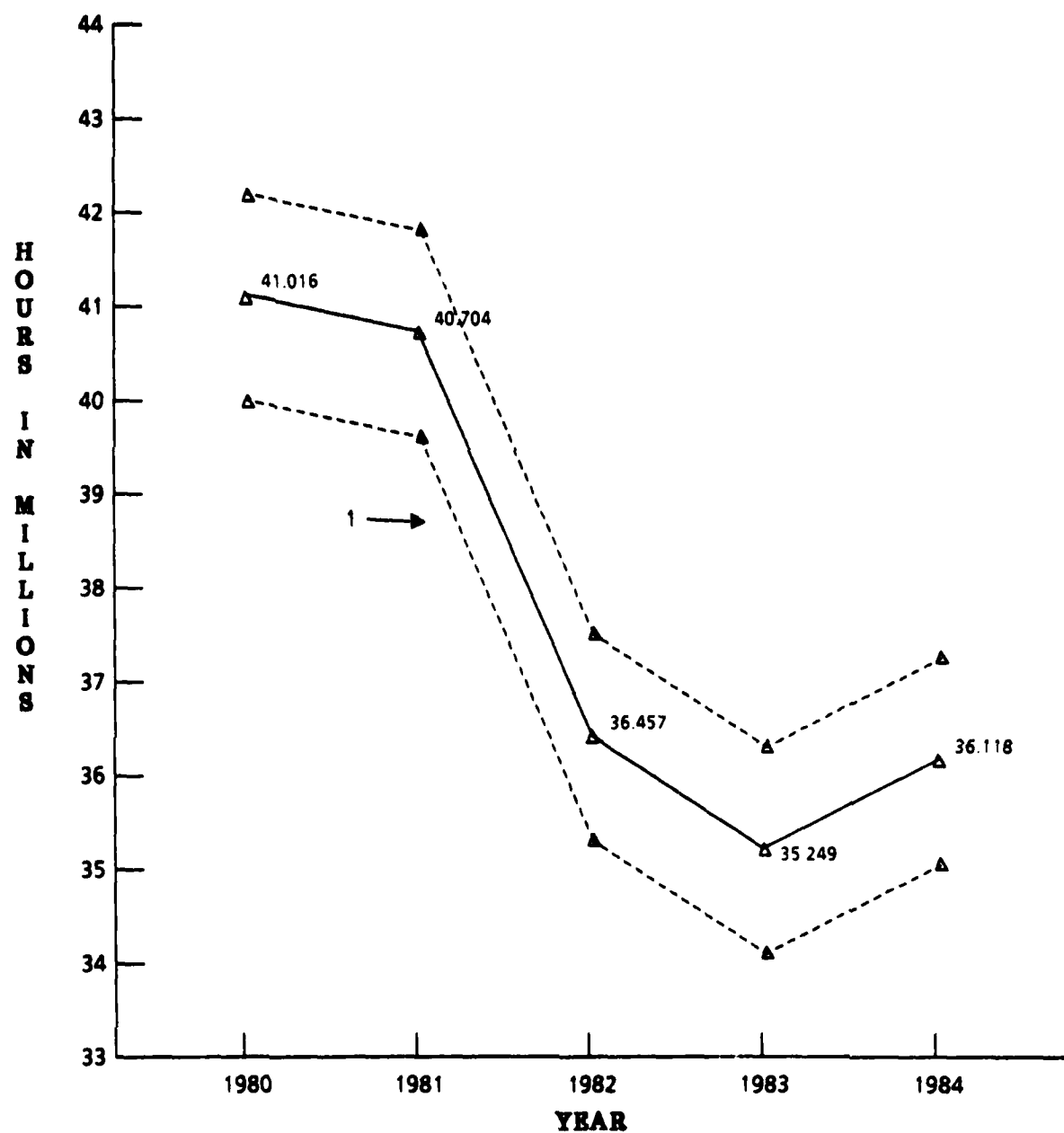
Five-year trends from 1979 to 1984 for total flight time and number of active aircraft are shown by aircraft type in Tables 1-2 and 1-3. Even though the number of active aircraft has registered an annual growth rate of about 1.0 percent, the trend for total flight time is downward at an annual rate of -3.6 percent. Closer examination of the tables reveals that the fixed-wing single engine piston aircraft and small twin engine piston aircraft are largely



SOURCE: TABLE 1-3

1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1980-1984 TRUE VALUES. SEE APPENDIX B

**FIGURE 1.2. GENERAL AVIATION ACTIVE FLEET SIZE, 1980 - 1984**

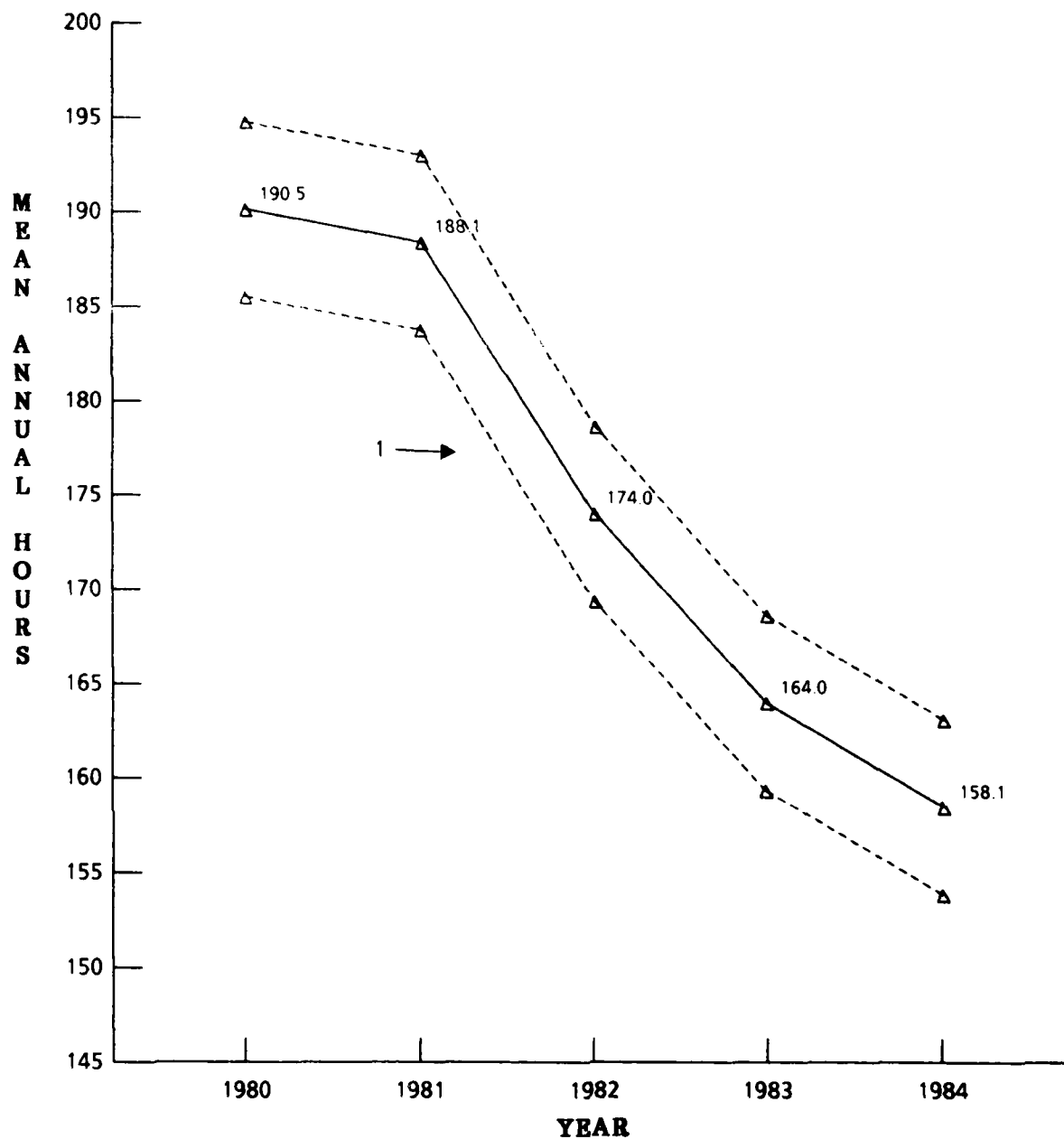


SOURCE: TABLE 2-1

1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1980-1984 TRUE VALUES. SEE APPENDIX B

**FIGURE 1.3. GENERAL AVIATION TOTAL FLYING TIME, 1980 - 1984**

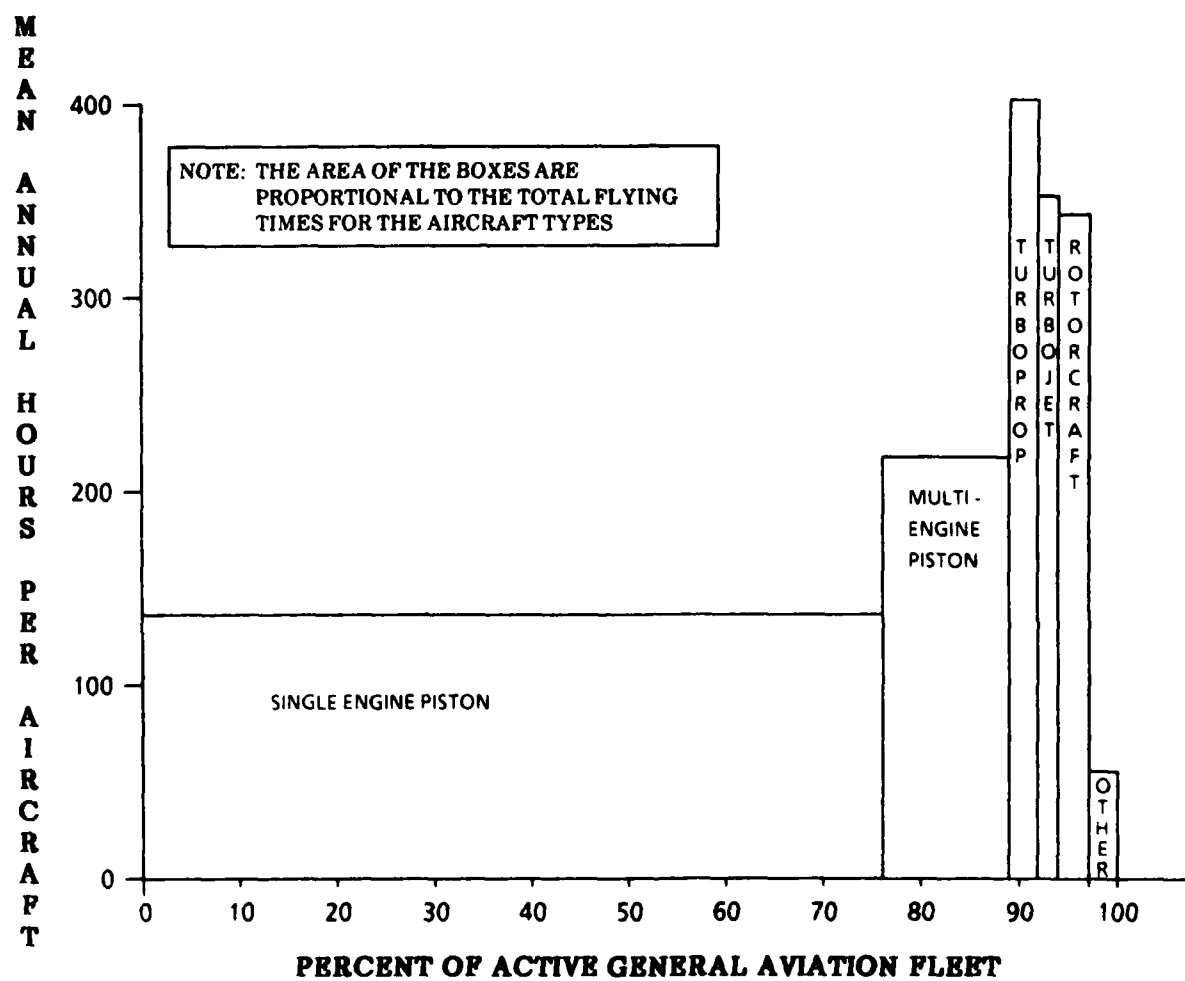




SOURCE: TABLE 2-1

1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1980 - 1984 TRUE VALUES. SEE APPENDIX B

**FIGURE 1.4. GENERAL AVIATION MEAN ANNUAL FLYING TIME FOR ACTIVE AIRCRAFT, 1980 - 1984**



SOURCE: TABLE 2-1

FIGURE 1.5. 1984 GENERAL AVIATION ACTIVITY BY AIRCRAFT TYPE

**TABLE 1-2. GROWTH OF GENERAL AVIATION TOTAL HOURS FLOWN  
BY AIRCRAFT TYPE, 1979 - 1984 (Thousands of Hours)**

AIRCRAFT TYPE	1979 (Standard Error)	1980 (Standard Error)	1981 (Standard Error)	1982 (Standard Error)	1983 (Standard Error)	1984 (Standard Error)	Compound Annual Growth Rate in %
<b>FIXED WING</b>							
1-engine piston 1 - 3 seats	11,180 (384)	10,044 (399)	10,185 (399)	8,325 (374)	8,189 (399)	8,586 (327)	-5.14
1-engine piston 4+ seats	19,109 (420)	18,295 (428)	17,506 (432)	15,934 (472)	14,959 (441)	14,919 (558)	-4.83
2-engine piston 1-6 seats	4,006 (148)	3,730 (172)	3,606 (144)	3,040 (177)	3,013 (192)	2,984 (114)	-5.72
2-engine piston 7+ seats	2,855 (137)	2,547 (143)	2,762 (153)	2,617 (197)	2,717 (235)	2,600 (165)	-1.85
Other piston	152 (15)	130 (18)	24 (63)	33 (10)	32 (10)	102 (30)	-7.67
2-engine turboprop 1 - 12 seats	1,254 (57)	1,489 (55)	1,549 (68)	1,576 (116)	1,431 (93)	1,715 (88)	6.46
2-engine turboprop 13+ seats	572 (45)	964 (55)	542 (45)	520 (84)	659 (118)	736 (75)	5.17
Other turboprop	45 (2)	56 (10)	62 (11)	71 (20)	83 (31)	54 (13)	3.71
2-engine turbojet	1,125 (39)	1,163 (52)	1,238 (48)	1,347 (98)	1,350 (92)	1,328 (66)	3.37
Other turbojet	134 (9)	169 (27)	149 (16)	264 (46)	124 (31)	237 (32)	12.08
<b>ROTORCRAFT</b>							
Piston	892 (97)	736 (75)	930 (108)	579 (58)	572 (49)	591 (66)	-7.90
Turbine	1,664 (108)	1,603 (115)	1,754 (150)	1,771 (145)	1,700 (151)	1,903 (120)	2.72
<b>OTHER</b>	353 (29)	359 (21)	391 (34)	379 (40)	420 (49)	358 (23)	28
<b>TOTAL AIRCRAFT</b>	43,340 (627)	41,016 (650)	40,704 (659)	36,456 (701)	35,249 (712)	36,118 (561)	-3.58

NOTE: Column summations may differ from printed totals due to estimation procedures.

**TABLE 1-3. GROWTH OF ACTIVE GENERAL AVIATION FLEET  
BY AIRCRAFT TYPE, 1979 - 1984 (Number of Aircraft)**

AIRCRAFT TYPE	1979 (Standard Error)	1980 (Standard Error)	1981 (Standard Error)	1982 (Standard Error)	1983 (Standard Error)	1984 (Standard Error)	Compound Annual Growth Rate in %
<b>FIXED WING</b>							
1-engine piston 1 - 3 seats	62,362 (594)	60,505 (688)	59,914 (748)	57,670 (910)	59,199 (976)	61,989 (724)	-1.12
1-engine piston 4+ seats	106,028 (450)	107,930 (538)	107,983 (656)	106,503 (687)	107,228 (778)	109,933 (603)	.73
2-engine piston 1-6 seats	16,891 (157)	16,224 (246)	16,749 (246)	16,381 (303)	16,249 (315)	16,539 (231)	-1.42
2-engine piston 7+ seats	7,958 (90)	8,141 (153)	8,607 (181)	8,501 (168)	8,660 (150)	8,719 (193)	1.84
Other piston	229 (11)	212 (17)	114 (29)	140 (24)	143 (14)	262 (35)	2.73
2-engine turboprop 1 - 12 seats	2,944 (13)	3,339 (41)	3,968 (46)	4,427 (45)	4,733 (72)	4,992 (47)	11.14
2-engine turboprop 13+ seats	538 (15)	627 (18)	557 (17)	610 (28)	578 (48)	640 (29)	3.53
Other turboprop	96 (3)	123 (10)	134 (5)	149 (23)	142 (38)	176 (15)	12.89
2-engine turbojet	2,309 (29)	2,551 (37)	2,808 (68)	3,309 (84)	3,447 (92)	3,780 (50)	10.36
Other turbojet	343 (6)	441 (13)	362 (23)	687 (73)	451 (91)	540 (45)	9.50
<b>ROTORCRAFT</b>							
Piston	3,123 (127)	2,794 (133)	3,250 (173)	2,419 (178)	2,541 (191)	2,936 (185)	-1.23
Turbine	2,740 (50)	3,207 (49)	3,724 (73)	3,749 (140)	3,998 (153)	4,160 (115)	8.71
<b>OTHER</b>	4,770 (114)	4,945 (142)	5,049 (179)	5,233 (211)	5,923 (207)	6,275 (172)	5.64
<b>TOTAL AIRCRAFT</b>	210,339 (789)	211,045 (945)	213,226 (1,078)	209,779 (1,238)	213,293 (1,345)	220,943 (1,032)	9.9

NOTE: Column summations may differ from printed totals due to estimation procedures.

responsible for the decline in hours, and have exhibited little growth over the last 5 years. On the other hand, fixed wing twin engine turboprops and twin engine turbojets have shown growth in both numbers and usage. In the rotorcraft area, piston-powered rotorcraft have been declining in number and hours flown, while turbine-powered rotorcraft have shown gains in both measures of activity from 1979 to 1984.

The general aviation aircraft fleet consumed an estimated 1,201 million gallons of fuel during 1984: 462 million gallons of aviation gasoline and 739 million gallons of jet fuel. From Figure 1.6, it is evident that turbojet and turboprop engines consume fuel at much higher rates than piston engines. The high rates account for turbojet's burning 36 percent of all fuel consumed in 1984, as shown in Figure 1.7 even though they represent only 2 percent of active aircraft. Fixed wing piston aircraft account for 38 percent of the fuel consumed in 1984 due to their high representation in the general aviation fleet. Table 2-21 shows more detailed fuel consumption estimates and their standard errors.

The general aviation aircraft fleet flew an estimated 4,393 billion miles over the land during 1984. The estimate is based on a mathematical model, incorporating speed differentials by phase of flight, cruising speed by manufacturer/model group of aircraft, and the number of hours flown by manufacturer/model group. Detailed estimates by aircraft type and primary use can be found in Table 2-22.

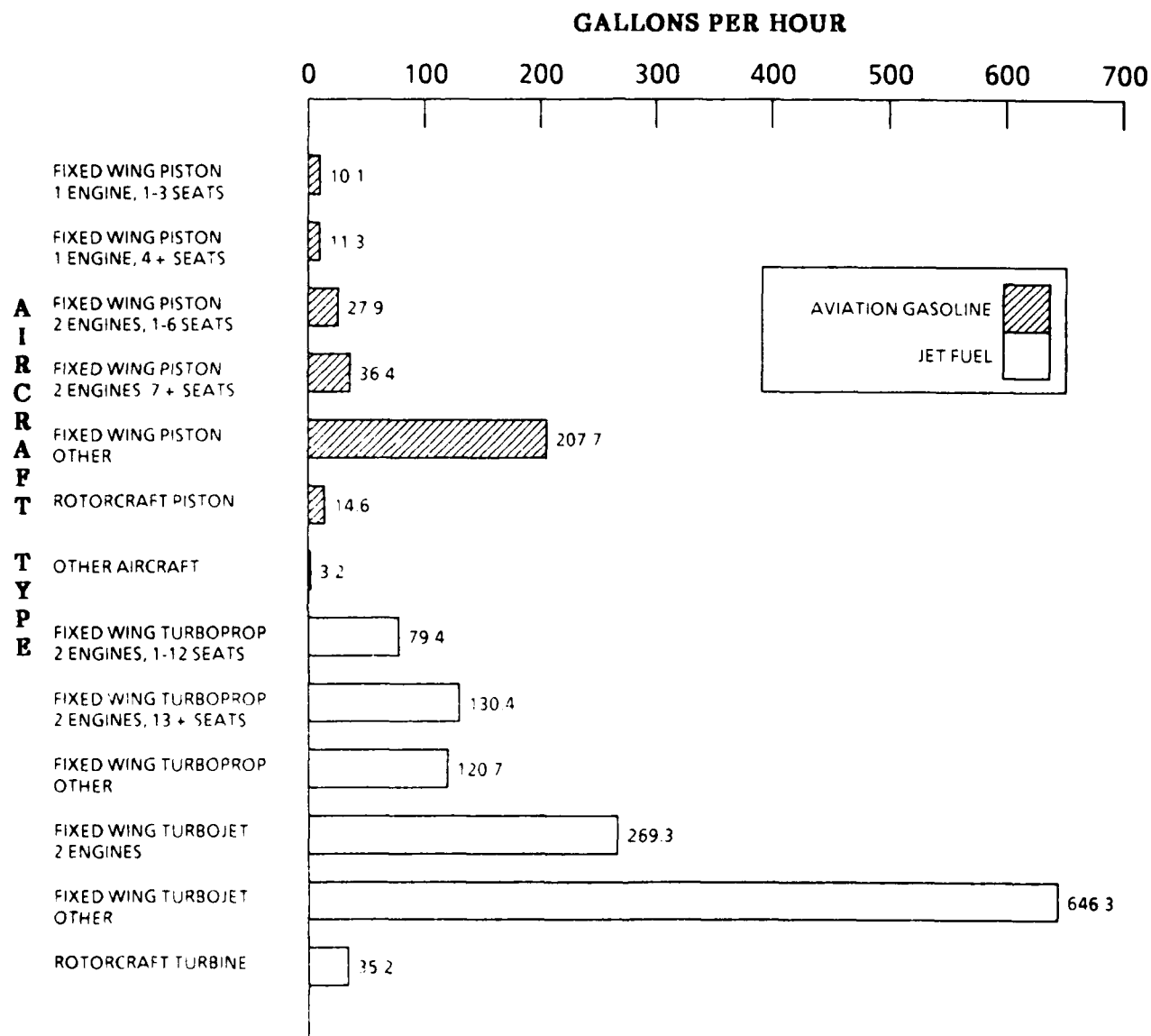
#### 1.4.3 Results by Primary Use

Like aircraft types, primary uses were differentiated by their activity characteristics, as shown in Figure 1.8. Distance along the vertical axis indicates mean hours per aircraft. Distance along the horizontal axis indicates the relative portion of the active fleet engaged in each primary use, and the area within each box is proportional to the total flying time for each primary use. Aircraft used as commuter air carriers showed the highest individual usage with a mean of 1,104 hours flown per aircraft. Aircraft used for instructional purposes, as air taxis and for rental purposes, also had fairly high levels of individual usage with mean hours flown per aircraft of 300, 401 and 307, respectively. General aviation aircraft were used most commonly for personal and business purposes, representing 48 and 21 percent of the active fleet. As mentioned above, total hours flown increased by 2.5 percent from 1983 to 1984. This was due to the moderate increases in the business, aerial applications and observations, air taxi and rental categories. The categories of executive, instructional, commuter air carrier, and other work, however, showed a slight decline in hours flown from last year.

#### 1.4.4 Results by Flying Conditions

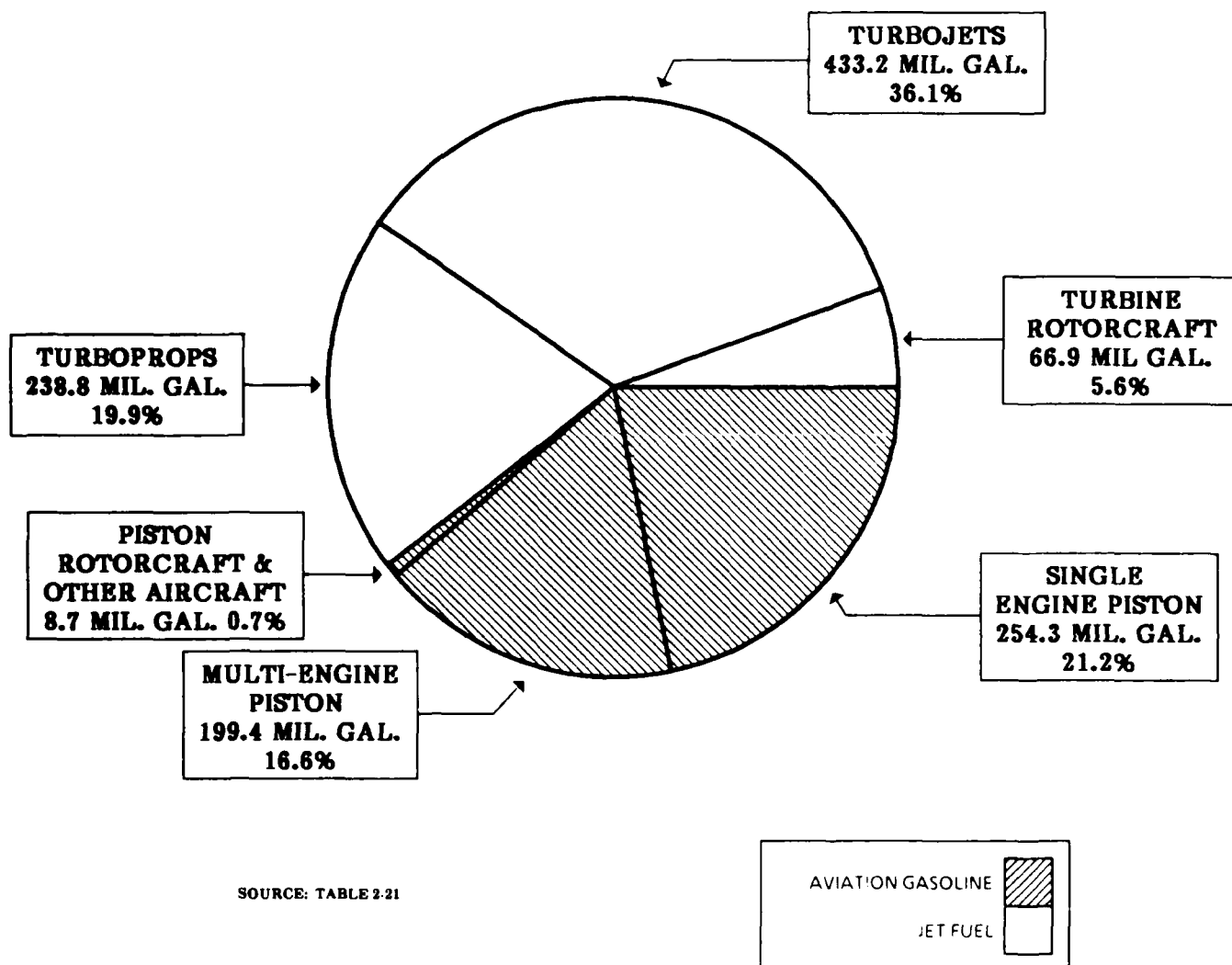
Survey results indicate that about 77 percent of the total hours logged by the 1984 general aviation fleet were flown in Visual Meteorological (VM) conditions during the day. Aircraft flown in VM night, Instrument Meteorological (IM) day, and IM night conditions accounted for 11 percent, 9 percent, and 3.5 percent of the total hours flown, respectively. These results are illustrated in Figure 1.9.

Not surprisingly, fixed wing single engine piston aircraft and rotorcraft spend the bulk of their flying time in VM conditions. Single engine piston aircraft fly 91 percent of their flight hours in VM conditions. Fixed wing piston aircraft with two engines, turboprops, and turbojets spend considerably more of their flying time in IM conditions, approximately 27, 30, and 37 percent, respectively. Table



SOURCE: TABLE 2.21

**FIGURE 1.6. 1984 MEAN FUEL CONSUMPTION RATES BY AIRCRAFT TYPE**



**FIGURE 1.7. 1984 ESTIMATED FUEL CONSUMPTION BY AIRCRAFT TYPE**

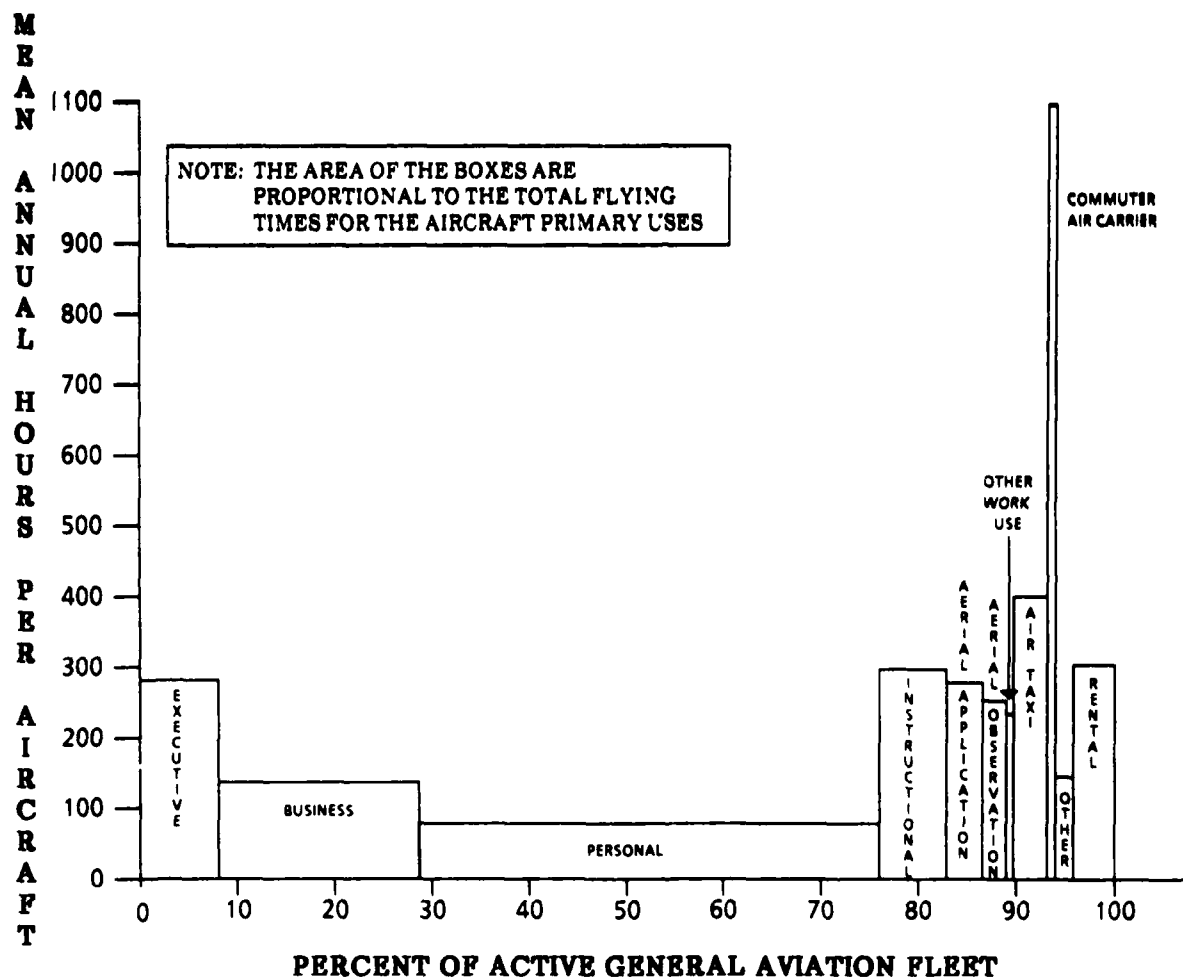
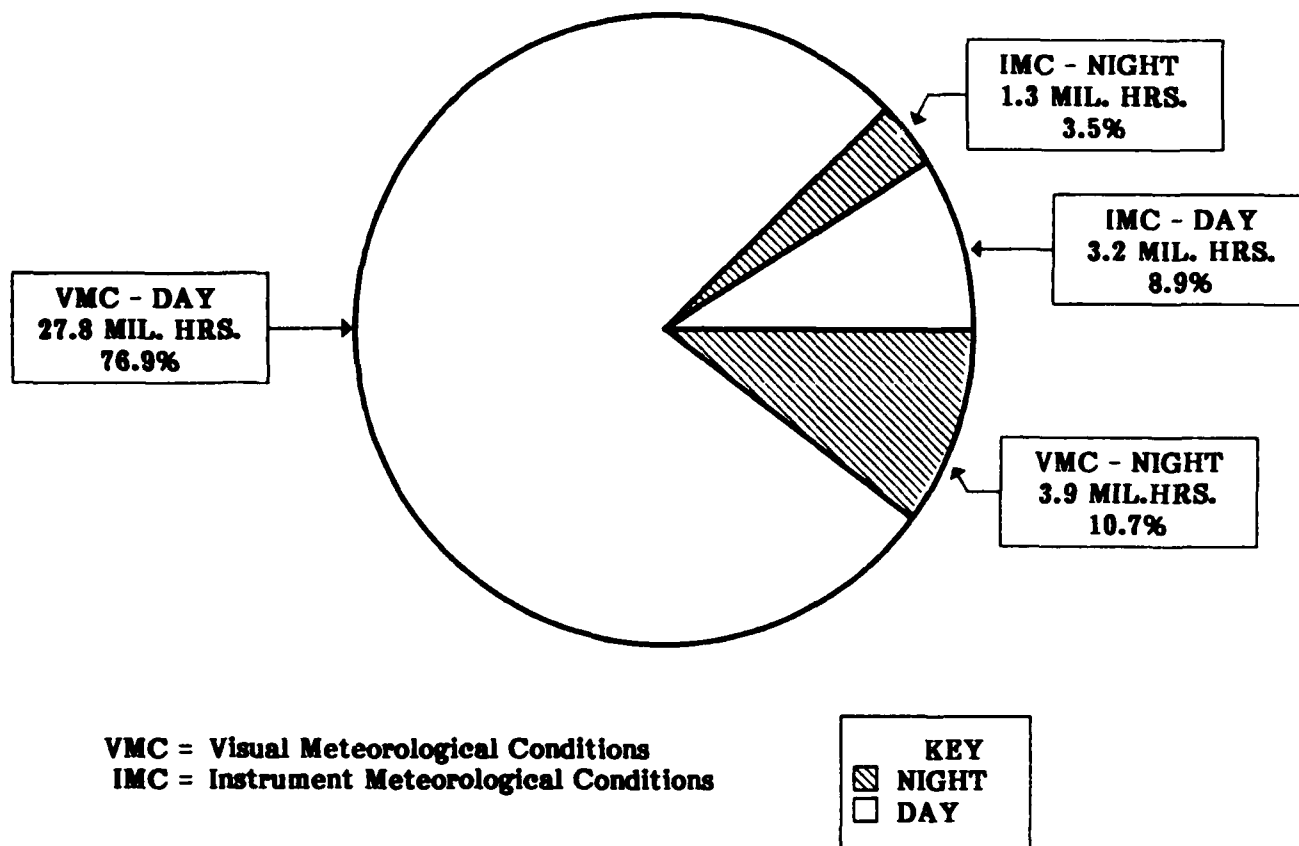


FIGURE 1.8. 1984 GENERAL AVIATION ACTIVITY BY PRIMARY USE





SOURCE: TABLE 2-12

**FIGURE 1.9. 1984 GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS**

2-12 contains more data on general aviation annual hours flown by weather and light conditions by aircraft type. In addition, Tables 2-13 and 2-14 give detailed breakdowns of general aviation annual hours flown by weather and light conditions by region of based aircraft and by SDR manufacturer/model group, respectively.

#### 1.4.5 Results by FAA Region

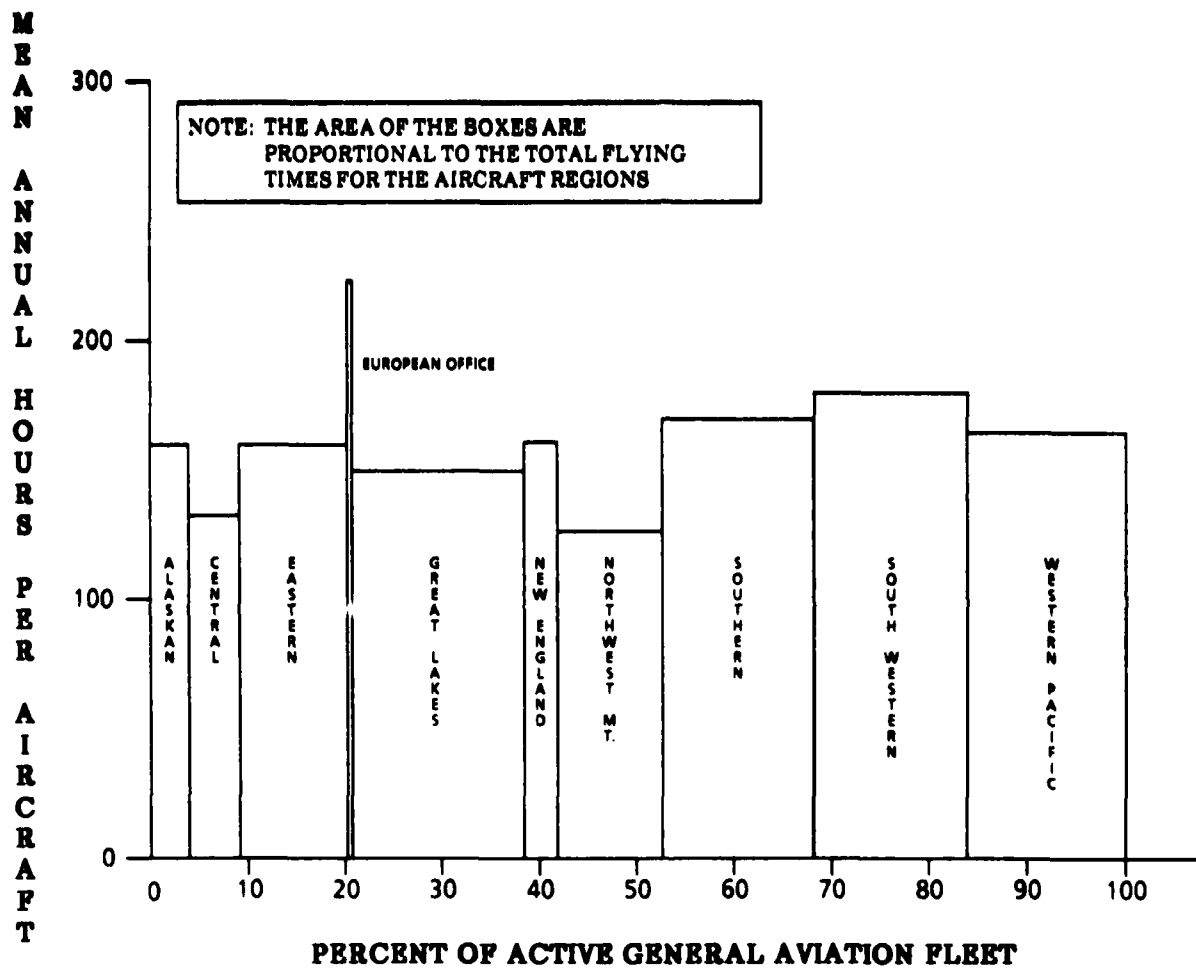
Although the total mean hours have decreased from 164 to 158 hours per aircraft in the past year, mean aircraft usage did not change significantly for any particular region from 1983 to 1984 with the exception of the European (Foreign) Region which decreased its mean hours of flying time per aircraft by almost 15 percent. In Figure 1.10, distance along the vertical axis indicates mean annual hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet based in each region, and the area within each box is proportional to the total flying time occurring in each region. It can be seen that the Great Lakes Region accounted for more active aircraft than any other region. However, the Western-Pacific and Southwestern Regions accounted for more total flight time. The smallest region in continental United States was New England, with only 3.8 percent of the active aircraft and about 4 percent of the fleet's total flight time.

Tables 2-3 and 2-8 contain more estimates by region; Tables 2-2 and 2-7 show similar estimates by state of based aircraft.

#### 1.4.6 Results by Avionics Capability

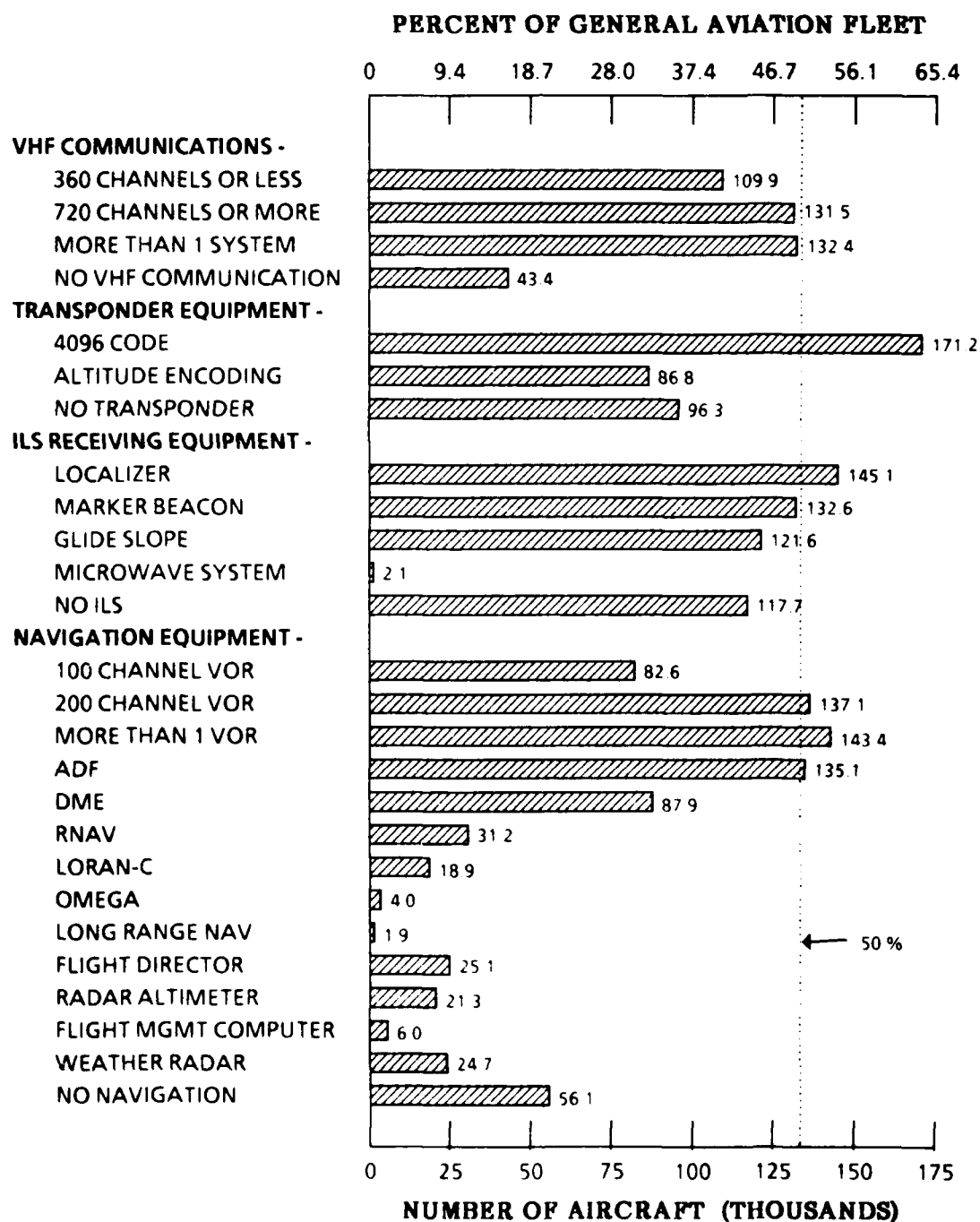
1.4.6.1 Individual Avionics Components - The extent to which general aviation aircraft are furnished with on-board avionics equipment was a principal finding of the survey. A summary appears in Figure 1.11. Eighty-four percent of the aircraft have two-way VHF communications, 64 percent are equipped with 4096-code transponders, 56 percent have at least one component of an instrument landing system, and 79 percent have some form of navigation equipment. It is evident from comparing the 1984 and 1979 avionics estimates that the general aviation fleet is becoming more sophisticated in terms of its avionics equipment. Within two-way communications, for example, there was a significant shift from 360 channel to 720 channel equipment. In terms of transponder equipment, there was a substantial increase in the percentage of the general aviation aircraft containing 4096 code transponders and altitude encoding equipment, while the percentage of aircraft containing no transponder equipment declined considerably over the 5 year period. The proportion of the general aviation fleet with transponders increased from 59 percent in 1979 to 64 percent in 1984, and the proportion with at least one part of an ILS increased from 54.2 percent to 56 percent. The proportion of aircraft having two or more communications systems increased by about 4 percent from 1979 to 1984. The proportion with two or more VOR receivers increased by 4 percent over the same 5 year period. More detailed breakdowns of avionics by aircraft type, state, region, and primary use are provided in Tables 2-15 through 2-18.

The three new categories of avionics equipment added to this year's survey were Weather Radar, LORAN-C, and Omega. LORAN-C and Omega are two specific types of Long Range Navigation equipment. The impact on the number of aircraft with Long Range Navigation equipment by the addition of these two specific categories will be discussed later in this chapter.



SOURCE: TABLE 2-3

FIGURE 1.10. 1984 GENERAL AVIATION ACTIVITY BY FAA REGION



SOURCE: TABLE 2.16

**FIGURE 1.11. AVIONICS EQUIPMENT IN THE 1984 GENERAL AVIATION AIRCRAFT FLEET**

Figure 1.12 shows the portion of active aircraft of each type which engaged in IFR (Instrument Flight Rules) flight during 1984 and further: the portions that flew IFR with and without transponder equipment. It can be seen that almost all active twin engine piston aircraft, turboprops, and turbojets flew IFR at some time during 1984 and were equipped with transponders. Although a much lower proportion of the active single engine piston aircraft and rotorcraft in the fleet flew IFR during the year, almost all that did were equipped with transponders. In fact, almost 100 percent of IFR flying was performed by aircraft equipped with transponders.

**1.4.6.2 Avionics Capability Groups** - Estimates of the number of aircraft containing individual pieces of avionics equipment are somewhat limited because they do not provide the means to determine an aircraft's overall ability to use the National Airspace System (NAS). Often, several pieces of equipment are required to obtain a certain capability in the NAS; it thus becomes necessary to study groups of avionics, rather than individual pieces. Therefore, avionics capability groups were developed to provide a framework for the GA fleet relating airborne avionics equipment to aircraft capability to perform in the NAS, and within this framework to analyze the activity and other characteristics of the GA fleet.

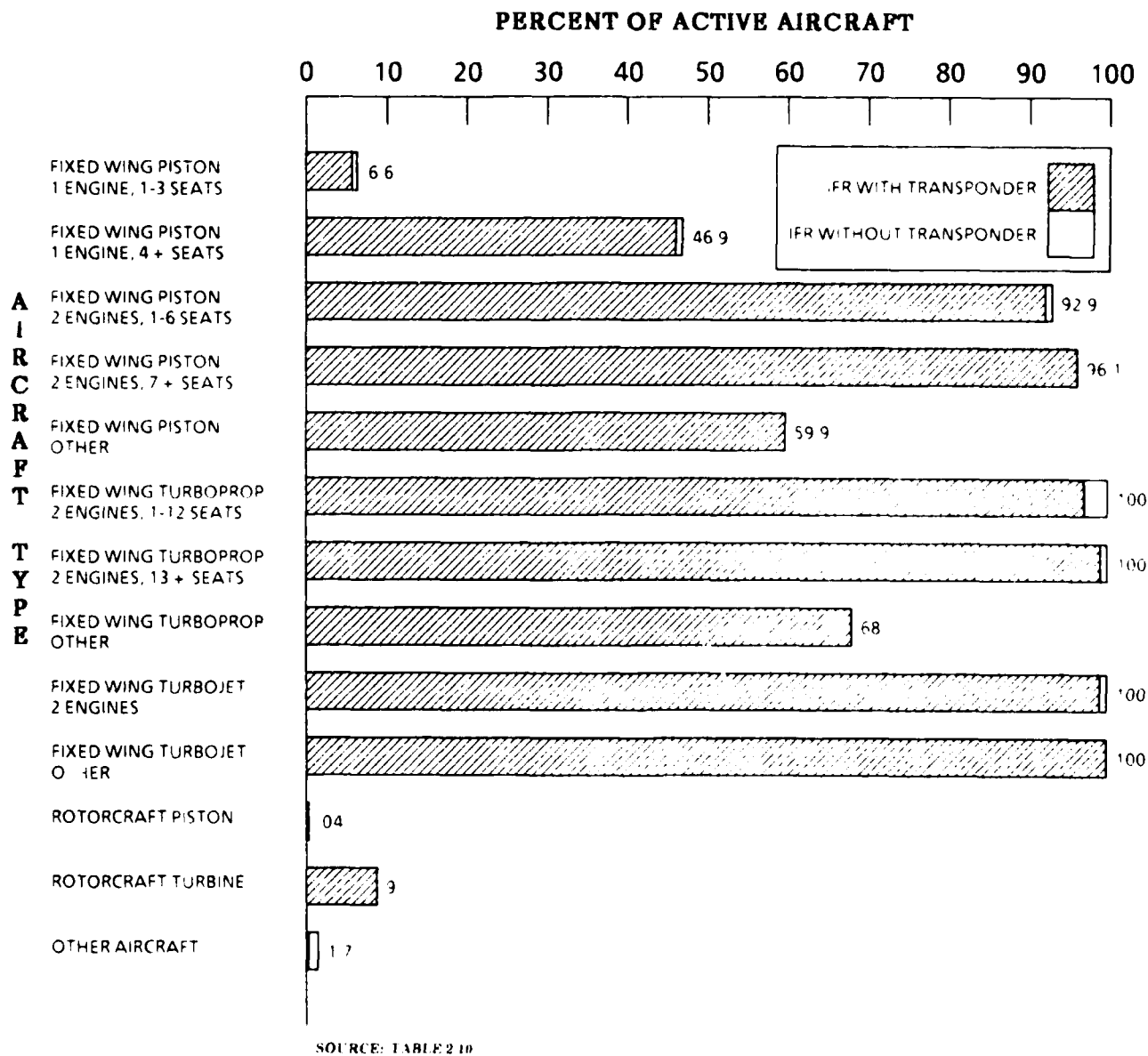
The methodology and assumptions for developing avionics capability groups are detailed in General Aviation Avionics Statistics.<sup>1</sup> This report also contains a glossary which explains numerous terms relating to avionics equipment and the National Airspace System.

Two classifications of capability groups (CG's) were developed. The first type consists of avionics equipment meeting FAA requirements for use of various aspects of the NAS. FAA regulations deal with three basic capabilities: (1) to fly in different segments of the airspace, (2) to fly under visual flight rules (VFR) and instrument flight rules (IFR) type of flight, and (3) to land at different classes of airports. In the formation of CG's of avionics equipment which relate to these three capabilities, the groups take on a hierarchical nature; that is, there is an order to the groups. Thus, the first type of CG became known as hierarchical. In general, the avionics equipment and the associated capabilities for one capability group are a subset of the avionics equipment and the associated capabilities for the next higher group.

The second type of capability group, non-hierarchical, consists of avionics which give an aircraft additional capability but which are not required equipment according to FAA regulations. The formation of the second type of CG involved grouping component pieces of avionics equipment which together would form a complete avionics system for enabling an aircraft to make full use of a landing, communications, or navigation system in the NAS.

Hierarchical CG's are described in Table 1-4 in terms of avionics equipment and associated capabilities. Non-hierarchical CG's are described in Table 1-5.

<sup>1</sup>General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), pp. 5-10.



**FIGURE 1.12. 1984 GENERAL AVIATION ACTIVE AIRCRAFT FLOWN  
IFR AND TRANSPONDER EQUIPPED**

**TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS**

AVIONICS	CAPABILITIES
<p><u>Group 1</u> No regulatory avionics</p>	<ol style="list-style-type: none"> <li>Up to and including 12,500 feet mean sea level (MSL) Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV ...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL</li> <li>VFR flight, day and night</li> <li>Uncontrolled airports</li> </ol>
<p><u>Group 2</u> Two-way communications</p>	<ol style="list-style-type: none"> <li>Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL</li> <li>VFR flight, day and night</li> <li>Non-TCA controlled airports Group III TCA's Helicopters with 4096 code transponders Group III TCA's All helicopters...Group I and II TCA's below 1,000 feet above ground level (AGL)</li> </ol> <p>NOTE: Air taxis with navigation system and transponder: Group II TCA's</p> <p>Air taxis with navigation system, transponder and altitude reporting: Group I TCA's and non-positive controlled airspace</p> <p>Air taxis with navigation system, DME, transponder and altitude reporting: Group I TCA's and positive controlled airspace</p>

**TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)**

AVIONICS	CAPABILITIES
<p><b>Group 3</b>  Two-way communications  Two systems--air taxis  VOR or Automatic Direction Finder (ADF) or RNAV</p>	<ol style="list-style-type: none"> <li>1. Up to and including 12,500 feet MSL  Gliders...Up to and including 18,000 feet MSL  ADF...Colored airways below 12,500 feet MSL  VOR or RNAV...VOR airways below 12,500 feet MSL  RNAV...Low altitude RNAV airways below 12,500 feet MSL</li> <li>2. IFR flight</li> <li>3. Non-TCA controlled airways  Group III TCA's  Helicopters with 4096 code transponders...Group II TCA's  All helicopters...Group I and II TCA's below 1,000 feet AGL</li> </ol>
<p><b>Group 4</b>  Two-way communications  Two systems--air taxis  4096 code transponder  VOR or RNAV</p>	<ol style="list-style-type: none"> <li>1. Up to and including 12,500 feet MSL  Gliders...Up to and including 18,000 feet MSL  VOR airways below 12,500 feet MSL  RNAV...Low altitude RNAV airways below 12,500 feet MSL</li> <li>2. IFR flight</li> <li>3. Non-TCA controlled airports  Group II TCA's  Helicopters...Group I TCA's below 1,000 feet AGL</li> </ol>
<p><b>Group 5</b>  4096 code transponder  Altitude encoding equipment</p>	<ol style="list-style-type: none"> <li>1. Non-positive controlled airspace</li> <li>2. VFR flight, day and night</li> <li>3. Uncontrolled airports  Group III TCA's</li> </ol>



**TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)**

AVIONICS	CAPABILITIES
<u>Group 6</u> Two-way communications 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters...Group I TCA's
<u>Group 7</u> Two-way communications Two systems--air taxis 4096 code transponder Altitude encoding equipment VOR	1. Non-positive controlled airspace VOR airways 2. IFR flight 3. Group I TCA's
<u>Group 8</u> Two-way communications Two systems--air taxis 4096 code transponder Altitude encoding equipment VOR or RNAV DME	1. Positive controlled airspace Jet routes RNAV...RNAV routes 2. IFR flight 3. Group I TCA's

**TABLE 1-5. NON-HIERARCHICAL CAPABILITY GROUPS**

AVIONICS	CAPABILITIES
<u>Group 1</u> Localizer	Partial use of airport ILS
<u>Group 2</u> Localizer Marker Beacon	Partial use of airport ILS
<u>Group 3</u> Localizer Marker Beacon Glide Slope	Full use of airport ILS
<u>Group 4</u> ILS Radar Altimeter	Landing approach in Category III <sup>1</sup> weather conditions at airports with Category III equipment
<u>Group 5</u> Long Range RNAV (LORAN-C, Omega, or other)	Area navigation over long distances and large bodies of water
<u>Group 6</u> Radar Altimeter	Determination of altitude above level of terrain
<u>Group 7</u> Microwave Landing System (MLS)	More accurate and flexible landing approaches, especially at airports with mountains and large buildings nearby
<u>Group 8</u> ILS MLS	Backup landing systems
<u>Group 9</u> Long Range RNAV (LORAN-C, Omega, or other) MLS	Sophisticated navigational and landing capabilities

<sup>1</sup>See Appendix D, "Weather Category Definitions," General Aviation Avionics Statistics (1979 Data), (Washington, DC, 1981)

Table 2-23 presents the estimates of the number of GA aircraft found in the hierarchical and non-hierarchical CG's. Examination of Table 2-23 reveals the following on the GA fleet:

- a. About 25.5 percent of GA aircraft have avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 68 percent of the GA fleet cannot fly above 12,500 feet due to avionics limitations alone.
- b. About 77 percent of GA aircraft are equipped to fly IFR.
- c. About 16 percent of the GA fleet are limited to landing at uncontrolled airports. Approximately 22 percent can land at either non-TCA controlled airports or Group III TCA's. Approximately 30 percent can land at any type of airport except a Group I TCA. About 31 percent can land at Group I TCA's.
- d. In general, Table 2-23 indicates that those aircraft in the least sophisticated non-hierarchical CG's also comprise the bulk of the least sophisticated hierarchical CG's. Of the aircraft possessing none of the non-hierarchical CG equipment (i.e. NO GROUP), 75.8 percent fall into hierarchical CG's 1, 2, and 3. Similarly, those aircraft in the most sophisticated non-hierarchical CG's are also in the most sophisticated hierarchical CG's. For example, 88 percent of the aircraft possessing a complete ILS and a radar altimeter fall into hierarchical CG 8.
- e. As mentioned previously, LORAN-C and Omega, two types of Long Range Navigation equipment, were added to the avionics section of the 1984 survey. These additions have had a strong impact on the reported total number of aircraft with Long Range Navigation equipment. In 1983 only 9,393 aircraft (3.6% of the total population) reported any type of Long Range Navigation equipment. In 1984, however, the reported number increased to 23,337 (8.7% of the total population). It is believed this increase reflects the specific addition of LORAN-C and Omega to the survey form, rather than a dramatic rise in the number of aircraft containing Long Range Navigation equipment.

Tables 2-24 through 2-33 show distributions of hierarchical and non-hierarchical capability groups versus aircraft characteristics. These characteristics include: primary use of the aircraft, hours flown during 1984, age of the aircraft, and computed aircraft type. The 13 computed aircraft types listed in Table 1-6 combine the four aircraft characteristics of engine type, number of engines, aircraft type (simple), and number of seats into meaningful combinations for the GA fleet.

Generally, those aircraft in low order CG's have less sophisticated characteristics than those in high order capability groups as follows:

- a. As in prior years, as the hierarchical CG's increase in sophistication, the predominant uses also change from personal, to business and personal, to executive and business (Table 2-24).
- b. As non-hierarchical CG's increase in sophistication, the predominant primary uses of aircraft change from personal, to business and personal, to business and executive. For example, executive aircraft alone composes

about 46 percent of the aircraft reporting both a radar altimeter and a complete ILS yet executive aircraft compose only 7.3 percent of the fleet (Table 2-29).

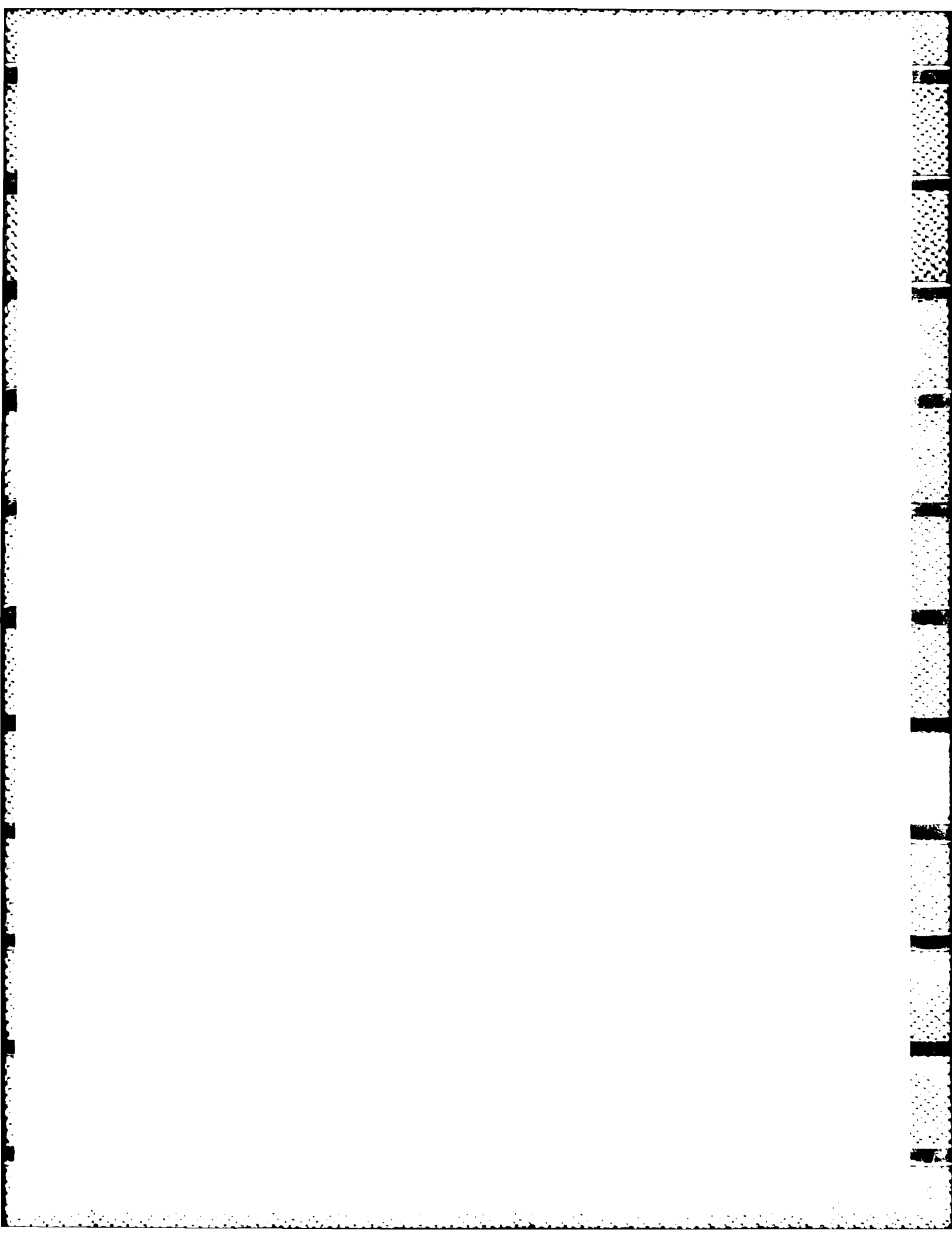
- c. In the case of both hierarchical and non-hierarchical capability groups, aircraft containing more avionics equipment and capabilities are flown more hours on the average than those with smaller investments in avionics equipment (Tables 2-25 and 2-30).
- d. Aircraft in the more sophisticated groups contain newer aircraft on the average than less sophisticated CG's (Tables 2-26 and 2-31).
- e. Computed aircraft type increases in sophistication as the level of avionics increases. (Tables 2-27 and 2-32).

**TABLE 1-6. COMPUTED AIRCRAFT TYPE**

TYPE	DESCRIPTION
1.	Fixed wing single engine piston 1-3 seats
2.	Fixed wing single engine piston 4+ seats
3.	Fixed wing two engine piston 1-6 seats
4.	Fixed wing two engine piston 7+ seats
5.	Fixed wing piston other
6.	Fixed wing two engine turboprop 1-12 seats
7.	Fixed wing two engine turboprop 13+ seats
8.	Fixed wing turboprop other
9.	Fixed wing two engine turbojet
10.	Fixed wing turbojet other
11.	Rotorcraft piston
12.	Rotorcraft turbine
13.	Other aircraft

#### **1.4.7 Other Results**

Additional results to those discussed above are found in the tables in Section 2. Estimates of total hours, mean hours, lifetime airframe hours, and number of active aircraft for over 360 SDR manufacturer/model groups of general aviation aircraft are found in Tables 2-5, 2-11, and 2-19. Appendix D contains definitions of these groups. The report also includes a table (Table 2-20) on mean hours and number of active engines for 76 different manufacturer/model groups of engines. Appendix E contains definitions of these groups.



## **2. TABLES OF RESULTS**

TABLE 2 - 1

GENERAL AVIATION TOTAL HOURS FLOWN  
BY  
TYPE OF AIRCRAFT  
1984

PAGE 1 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING									
FIXED WING - PISTON									
1 ENG: 1-3 SEATS	86532	61889	724	8586922	327381	3.8	139.4	5.3	3.8
1 ENG: 4+ SEATS	121884	108933	803	14919421	358164	2.4	136.8	3.2	2.4
1 ENGINE: TOTAL	208516	171922	942	23506340	485242	2.1	137.7	2.8	2.0
2 ENG: 1-6 SEATS	18930	16539	231	2984389	114793	3.8	180.6	6.6	3.7
2 ENG: 7+ SEATS	10180	8719	193	2600555	165255	6.4	302.8	17.2	5.7
2 ENGINE: TOTAL	29109	25258	301	5584943	201213	3.6	218.2	7.0	3.2
PISTON: OTHER	392	282	35	102329	30196	29.5	433.4	107.4	24.8
PISTON: TOTAL	238017	197442	990	29193610	526174	1.8	147.1	2.6	1.8
FIXED WING - TURBOPROP									
2 ENG: 1-12 SEATS	5131	4992	47	1715165	88730	5.2	342.2	18.8	5.5
2 ENG: 13+ SEATS	691	640	29	736682	75454	10.2	1111.8	83.5	7.5
2 ENGINE: TOTAL	5822	5633	55	2451847	116474	4.8	416.0	18.8	4.5
TURBOPROP: OTHER	195	176	15	54420	13678	25.1	339.3	58.1	17.1
TURBOPROP: TOTAL	6017	5809	58	2506267	117275	4.7	414.2	18.4	4.4

TABLE 2 - 1

## GENERAL AVIATION TOTAL HOURS FLOWN

BY  
TYPE OF AIRCRAFT  
1984

PAGE 2 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING - TURBOJET									
2 ENGINE TURBOJET	3948	3780	50	1328491	88783	5.0	348.6	14.2	4.1
TURBOJET: OTHER	900	540	45	237125	32819	13.8	392.6	57.7	14.7
TURBOJET: TOTAL	4848	4320	67	1565616	74412	4.8	353.6	14.2	4.0
FIXED WING: TOTAL	248880	207571	994	33265490	544196	1.6	158.0	2.6	1.6
ROTORCRAFT									
PISTON	5516	2936	185	591988	66924	11.3	186.8	18.2	9.8
TURBINE	4774	4160	115	1903315	120680	6.3	488.7	29.8	6.4
ROTORCRAFT: TOTAL	10290	7096	218	2495303	137994	5.5	343.6	18.5	5.4
OTHER	8259	6275	172	358017	23742	6.6	56.5	3.6	6.4
TOTAL	267429	220943	1032	36118816	561921	1.6	158.1	2.5	1.6



TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN  
BY  
STATE OF BASED AIRCRAFT  
1984

PAGE 1 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALABAMA	3234	381	584511	113690
ALASKA	7684	490	1248714	127685
ARIZONA	5177	479	792410	142508
ARKANSAS	2920	338	472351	78170
CALIFORNIA	30494	1070	4983289	355808
COLORADO	5180	469	804448	115094
CONNECTICUT	1863	283	333203	85017
DELAWARE	533	144	71273	24435
DIST. OF COLUMBIA	31	28	9268	15528
FLORIDA	12720	722	2377712	247690
GEORGIA	4450	437	773334	121770
HAWAII	463	143	205967	95327
IDAH0	2328	322	240484	49516
ILLINOIS	9087	633	1557025	169999
INDIANA	3797	394	715804	162246
IOWA	3416	384	474444	89159
KANSAS	3713	398	475145	70593
KENTUCKY	1802	289	273660	84197
LOUISIANA	4627	419	1294062	220930
MAINE	1055	206	142635	37466
MARYLAND	2870	356	434351	72442

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN  
BY  
STATE OF BASED AIRCRAFT  
1984

PAGE 2 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
MASSACHUSETTS	3318	384	579089	101344
MICHIGAN	7088	548	998185	144819
MINNESOTA	5139	458	867595	93778
MISSISSIPPI	2082	300	327286	87278
MISSOURI	4398	444	818448	89833
MONTANA	2472	330	308743	71287
NEBRASKA	1805	278	238842	50228
NEVADA	1823	277	282247	84889
NEW HAMPSHIRE	1298	236	188475	52715
NEW JERSEY	4041	413	702804	122291
NEW MEXICO	2300	303	373030	75915
NEW YORK	8599	531	1085738	181287
NORTH CAROLINA	4412	441	761159	108887
NORTH DAKOTA	1572	284	214605	47932
OHIO	7553	572	1115400	138448
OKLAHOMA	5345	489	886375	166881
OREGON	5032	482	559295	77748
PENNSYLVANIA	6205	508	1055132	137471
RHODE ISLAND	398	135	78877	34091
SOUTH CAROLINA	1881	273	214130	48080
SOUTH DAKOTA	1393	247	207404	58293

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN  
BY  
STATE OF BASED AIRCRAFT  
1984

PAGE 3 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
TENNESSEE	2884	360	511589	98852
TEXAS	19941	891	3405101	281851
UTAH	1337	245	208494	59300
VERMONT	488	127	87011	38210
VIRGINIA	3137	371	582078	123903
WASHINGTON	6885	525	865172	125878
WEST VIRGINIA	880	188	120883	45289
WISCONSIN	4180	425	582865	93834
WYOMING	1474	259	191753	46048
PUERTO RICO	422	134	72257	25021
OTHER U.S. TERRITORIES	76	55	27783	24088
FOREIGN	1489	241	571730	183855
TOTAL	220843	1032	38118816	561921

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 3  
GENERAL AVIATION TOTAL HOURS FLOWN  
BY  
REGION OF BASED AIRCRAFT  
1984

REGION	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALASKAN	7684	490	1246714	127685
CENTRAL	13331	746	1818788	147151
EASTERN	24297	973	4076987	272183
EUROPEAN OFFICE	527	154	125186	59666
GREAT LAKES	39788	1212	6050488	319709
NEW ENGLAND	8393	591	1402418	140877
NORTHWEST MT.	24502	974	3204480	197354
SOUTHERN	34007	1132	6004974	319307
SOUTHWESTERN	35341	1131	6672130	393384
WESTERN-PACIFIC	38414	1181	6358262	409283
TOTAL	220943	1032	36118816	561921

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 4

## GENERAL AVIATION TOTAL HOURS FLOWN

BY  
AIRCRAFT TYPE AND PRIMARY USE  
1984

PAGE 1 OF 3

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS												
EST. TOT. HOURS	4794	350958	2487815	2713237	1837247	284767	151274	0	0	80703	876333	8586925
% STD. ERROR	80.9	15.1	3.7	9.7	5.2	24.8	28.2	0.0	0.0	20.6	22.0	3.8
1 ENG: 4+ SEATS												
EST. TOT. HOURS	557914	4174407	5309564	1518144	121665	577368	83891	87542	629822	99548	1759560	14919428
% STD. ERROR	15.1	4.3	4.2	13.3	43.1	19.6	38.3	42.1	15.0	32.1	10.5	2.4
1 ENGINE: TOTAL												
EST. TOT. HOURS	582707	4525363	7797179	4231380	1758911	862135	235165	87542	629822	180248	2635894	23506348
% STD. ERROR	15.0	4.1	3.1	7.9	5.2	15.4	21.9	42.1	15.0	15.9	10.0	2.1
2 ENG: 1-6 SEATS												
EST. TOT. HOURS	702956	1144197	327086	68621	5181	57504	0	125872	454214	28192	69785	2984388
% STD. ERROR	11.3	8.1	11.3	27.2	66.0	38.2	0.0	43.4	16.7	33.9	27.9	3.8
2 ENG: 7+ SEATS												
EST. TOT. HOURS	754018	461457	51831	19218	32078	30213	4152	486314	705946	16233	39098	2800555
% STD. ERROR	12.3	17.2	31.2	70.3	42.7	36.4	102.8	22.5	16.6	48.1	62.3	6.4
2 ENGINE: TOTAL												
EST. TOT. HOURS	1456974	1605654	378918	88839	37257	87717	4152	611987	1160160	44425	108863	5584943
% STD. ERROR	8.3	6.3	10.7	28.1	37.0	28.1	102.8	20.0	11.7	26.8	28.6	3.6
PISTON: OTHER												
EST. TOT. HOURS	919	776	168	0	8492	45	275	1963	56337	143	33211	102329
% STD. ERROR	122.9	70.7	253.0	0.0	43.5	352.5	293.0	352.5	48.2	217.3	44.3	29.5
PISTON: TOTAL												
EST. TOT. HOURS	2020600	8131794	8178286	4320219	1804860	949898	239591	701492	1846318	224816	2777988	29193618
% STD. ERROR	7.4	3.5	3.0	7.7	5.3	14.4	21.6	17.9	9.0	13.8	9.6	1.8
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS												
EST. TOT. HOURS	1131004	299545	11291	0	0	12744	3438	43904	172601	31176	9464	1715165
% STD. ERROR	8.4	19.6	53.0	0.0	0.0	29.4	64.4	58.8	23.4	29.7	88.5	5.2

TABLE 2 - 4

## GENERAL AVIATION TOTAL HOURS FLOWN

BY

AIRCRAFT TYPE AND PRIMARY USE

1984

PAGE 2 OF 3

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUMENTAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
2 ENG: 13+ SEATS												
EST. TOT. HOURS	122231	2201	0	337	0	1508	514	589379	10711	9750	51	736882
% STD. ERROR	15.8	146.5	0.0	92.6	0.0	116.6	304.4	12.8	75.3	83.1	304.4	10.2
2 ENGINE: TOTAL												
EST. TOT. HOURS	1253235	301746	11291	337	0	14252	3949	633284	183311	40926	9515	2451847
% STD. ERROR	7.7	19.5	53.0	92.6	0.0	42.5	60.7	14.0	22.6	27.7	88.6	4.8
TURBOPROP: OTHER												
EST. TOT. HOURS	5125	2295	0	0	36450	535	0	0	0	9767	247	54420
% STD. ERROR	38.5	93.2	0.0	0.0	12.8	276.4	0.0	0.0	0.0	151.0	278.1	25.1
TURBOPROP: TOTAL												
EST. TOT. HOURS	1258360	304041	11291	337	36450	14788	3949	633284	183311	50893	9762	2508267
% STD. ERROR	7.7	19.5	53.0	92.6	12.8	43.7	60.7	14.0	22.6	30.0	86.0	4.7
FIXED WING - TURBOJET												
2 ENGINE TURBOJET												
EST. TOT. HOURS	1056367	79605	8771	66	0	0	0	67910	100534	14421	817	1328491
% STD. ERROR	5.0	28.9	50.8	190.8	0.0	0.0	0.0	57.4	23.3	37.9	91.4	5.0
TURBOJET: OTHER												
EST. TOT. HOURS	87059	36703	378	213	0	0	0	93268	808	14675	4022	237125
% STD. ERROR	17.7	57.9	404.4	90.7	0.0	0.0	0.0	0.0	284.9	41.5	262.5	13.8
TURBOJET: TOTAL												
EST. TOT. HOURS	1143426	116307	9147	279	0	0	0	161178	101343	29086	4839	1585516
% STD. ERROR	4.8	27.1	50.4	94.0	0.0	0.0	0.0	24.4	23.2	26.3	205.9	4.8
FIXED WING: TOTAL												
EST. TOT. HOURS	4422366	6552142	8196705	4320835	1841111	964685	243541	1485954	2130973	304606	2792569	33265498
% STD. ERROR	4.5	3.4	3.0	7.7	5.2	14.2	20.9	11.6	8.1	11.4	9.6	1.6
ROTORCRAFT												
PISTON												
EST. TOT. HOURS	14056	27103	35705	162400	94302	128398	1863	0	13881	111237	3020	591988
% STD. ERROR	45.2	20.1	22.2	19.6	27.0	27.2	78.7	0.0	100.0	33.1	122.7	11.3

TABLE 2 - 4

## GENERAL AVIATION TOTAL HOURS FLOWN

GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE AND PRIMARY USE 1984															PAGE 3 OF 3	
AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUMENTAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL				
TURBINE																
EST. TOT. HOURS	329544	48783	5626	15677	72753	211285	43980	8111	873270	276207	18100	1903315				
% STD. ERROR	20.1	29.7	85.5	43.8	45.4	30.6	37.6	149.7	15.8	26.2	69.8	6.3				
ROTORCRAFT: TOTAL																
EST. TOT. HOURS	343602	75886	41331	178077	167055	339883	45843	8111	887151	387443	21121	2495303				
% STD. ERROR	18.5	20.0	21.0	18.6	23.7	18.6	35.2	149.7	15.6	19.9	58.4	5.5				
OTHER																
EST. TOT. HOURS	7385	6771	179482	53731	0	9545	22811	0	937	38674	40880	358017				
% STD. ERROR	49.7	36.5	9.0	27.0	0.0	36.0	29.1	0.0	70.0	26.0	25.2	6.6				
TOTAL																
EST. TOT. HOURS	4773373	6634800	8417519	4552643	2008165	1313913	311895	1504065	3019061	728722	2854569	36118816				
% STD. ERROR	4.3	3.3	2.9	7.4	5.1	11.6	16.3	11.6	7.2	10.2	9.3	1.6				

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.  
 ROW SUMMATIONS MAY DIFFER FROM PRINTED TOTALS BECAUSE SOME ACTIVE AIRCRAFT DID NOT REPORT USE.

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT  
BELONGING TO MANUFACTURER/MODEL GROUPS OF FEWER THAN  
20 AIRCRAFT IN SIZE FOR AIRCRAFT TYPE XX WHERE XX STANDS  
FOR:

- 01 FIXED WING PISTON, 1 ENGINE, 1-3, SEATS.
- 02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
- 03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
- 04 FIXED WING PISTON, 2 ENGINE, 7+ SEATS.
- 05 FIXED WING PISTON, OTHER.
- 06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
- 07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
- 08 FIXED WING TURBOPROP, OTHER.
- 09 FIXED WING TURBOJET, 2 ENGINES.
- 10 FIXED WING TURBOJET, OTHER.
- 11 ROTORCRAFT, PISTON.
- 12 ROTORCRAFT, TURBINE.
- 13 OTHER AIRCRAFT.



TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

PAGE 1 OF 18

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
OTHER 1	14004	407480	62695	15.4	53.5	7.7	14.4
OTHER 2	1404	133204	26793	20.1	152.5	28.0	18.4
OTHER 3	335	7508	3530	47.0	82.9	22.1	26.6
OTHER 4	285	43383	13863	32.0	253.0	71.9	28.4
OTHER 5	158	59230	25760	43.5	649.5	249.1	38.4
OTHER 6	360	129460	24816	19.2	408.1	68.4	16.8
OTHER 7	190	188088	62549	33.3	1200.9	348.6	28.9
OTHER 8	99	13583	12831	94.5	166.3	154.1	92.7
OTHER 9	569	139141	29647	21.3	270.2	53.8	19.9
OTHER 10	250	34965	19925	57.0	169.8	94.0	55.4
OTHER 11	1578	33442	9424	28.2	55.9	12.1	21.7
OTHER 12	316	69091	29892	43.3	405.3	115.7	28.5
OTHER 13	2289	48929	9836	21.2	33.7	6.4	18.8
ADAMS A50S	103	7851	2264	29.6	80.9	23.3	28.7
AERORSJ2	35	426	291	68.2	44.7	22.1	49.5
AEROSPSA316	139	95512	15405	16.1	703.5	92.4	13.1
AGUSTA A109	54	3485	3578	102.7	64.5	66.3	102.7
AIRSPACE 18	22	110	128	116.3	40.0	0.0	0.0
AIRPTSA	233	8641	4256	49.3	104.8	38.2	36.5
AIRTRCAT300	407	127213	16468	12.9	359.3	34.7	9.7
AIRTRCAT400	50	19943	1786	9.0	398.9	35.7	9.0

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

PAGE 2 OF 18

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
AMD FALC10	143	51944	5720	11.0	383.2	40.0	11.0
AMD FALC20	208	73321	10373	14.1	358.3	49.3	13.8
AMD FALC50	100	51095	5727	11.2	511.0	57.3	11.2
AMTR TMK	26	149	339	228.0	60.0	18.1	31.8
ARCTICS1A	91	1928	854	44.3	52.9	18.3	34.7
ARCTICS1B1	23	318	107	33.7	21.4	3.5	16.5
ARONCA15	198	7563	2227	29.4	46.2	8.9	19.3
ARONCA58	149	1652	770	46.6	48.1	9.7	21.0
ARONCA65	147	2197	838	38.2	36.4	9.2	25.2
ARONCAC3	60	238	93	38.9	14.4	3.2	22.5
AVIAN/FALCON	27	388	91	23.4	18.3	3.5	19.2
AVIAN/STYRK	39	858	267	31.2	21.9	6.8	31.2
AYRES S2	903	253612	45587	18.0	349.3	49.7	14.2
BAC 111	26	5937	1450	24.4	228.3	55.8	24.4
BAG B206	32	2765	678	24.5	93.9	12.1	12.9
BAG DH125	69	31012	2675	8.6	449.4	38.8	8.6
BALMKS/FIREFY	1253	55410	9115	16.4	49.3	7.6	15.3
BBAVIA11	830	27413	10222	37.3	103.9	29.8	28.6
BBAVIA7	3488	153671	21420	13.9	63.6	7.7	12.0
BBAVIA8	238	24340	5897	23.4	104.7	24.3	23.2
BEECH 100	275	90292	15388	17.1	328.3	56.0	17.1

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

PAGE 3 OF 18

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BEECH 17	195	4179	2207	52.8	57.9	18.8	32.5
BEECH 18	867	147093	63535	43.2	338.1	118.1	35.1
BEECH 200	864	410883	58920	14.6	475.6	69.4	14.6
BEECH 23	2843	276380	29124	10.5	107.2	10.9	10.2
BEECH 300	21	2689	676	25.3	127.1	32.2	25.3
BEECH 33	1720	215885	20371	9.4	128.8	11.9	9.2
BEECH 35	6913	608189	42350	7.0	98.7	6.3	6.4
BEECH 36	2101	370376	38585	10.4	178.7	18.4	10.3
BEECH 45	295	45503	13038	28.6	240.9	57.9	24.0
BEECH 50	336	24989	6617	26.5	103.1	20.5	19.9
BEECH 55	2277	347797	28758	8.3	159.7	12.7	7.9
BEECH 56	64	4888	1388	27.4	115.2	23.4	20.3
BEECH 58	1515	361746	31889	8.8	243.4	20.8	8.6
BEECH 60	429	68591	12550	18.3	164.3	29.3	17.8
BEECH 65	132	33332	19624	58.9	265.5	154.7	58.3
BEECH 76	329	54075	11351	21.0	168.5	34.6	20.5
BEECH 77	248	62630	11778	18.8	260.1	47.4	18.2
BEECH 80	180	39685	32848	82.3	248.1	198.6	80.7
BEECH 90	1119	330008	31209	9.5	294.9	27.9	9.5
BEECH 95	487	36426	10541	28.9	84.2	23.4	27.8
BEECH 99	94	113385	19490	17.2	1258.5	201.8	16.0

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BELL 47	1260	207649	44492	21.4	233.6	41.8	17.9
BELL 204	25	4250	1830	45.4	212.5	86.6	40.8
BELL 205	25	1081	1355	125.3	173.0	8.6	5.0
BELL 206	2237	1051552	106176	10.1	510.8	46.8	9.2
BELL 212	122	49634	9020	18.2	406.8	73.9	18.2
BELL 222	57	17409	5448	31.3	317.6	98.8	30.5
BELL 412	26	22360	6657	29.8	860.0	256.0	29.8
BLANCA11	80	1713	686	40.0	46.4	12.0	25.8
BLANCA1413	267	2052	818	39.9	16.9	5.0	29.7
BLANCA1419	271	9527	3092	32.5	43.7	13.2	30.2
BLANCA17	1066	124956	13379	10.7	122.1	12.4	10.2
BLANCA7	2352	142903	23253	16.3	60.9	11.7	14.5
BLANCA8	479	41559	5828	14.0	94.1	12.7	13.5
BNDRM BN2	115	54012	6728	12.5	660.8	67.7	10.2
BOEING707	78	2948	3667	124.4	236.3	28.1	11.9
BOEING720	24	0	0	0.0	0.0	0.0	0.0
BOEING727	109	36974	24381	65.9	589.9	281.9	47.8
BOEING737	15	15000	0	0.0	1000.0	0.0	0.0
BOEING747	30	2310	0	0.0	77.0	0.0	0.0
BOEING75	1915	35457	8080	22.8	57.5	7.4	13.0
BOEING767	4	0	0	0.0	0.0	0.0	0.0

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BOLKMS117	23	1863	692	37.1	126.0	0.0	0.0
BRANTLY B2	128	4560	2328	51.0	81.7	30.3	37.1
BRASOVIS28	51	3292	827	25.1	73.1	17.5	23.9
BRVSTRFLEET2	28	599	177	29.5	48.1	7.3	15.1
BRVSTRFLEET7	23	243	107	44.0	29.6	7.2	24.3
BUKER 131	30	212	164	77.3	33.0	7.3	22.0
CARRONMODELO	188	6743	2040	30.3	40.1	11.3	28.3
CESSNA120	876	16452	3806	23.1	36.0	4.4	12.3
CESSNA140	2358	63936	10038	15.7	38.6	5.3	13.6
CESSNA150	19858	3778140	284712	7.5	211.5	15.5	7.3
CESSNA170	2473	130975	17157	13.1	66.6	7.5	11.3
CESSNA172	25385	3829809	226252	5.9	160.4	9.3	5.8
CESSNA175	1325	68178	8575	12.6	56.9	6.4	11.2
CESSNA177	2891	299627	21789	7.3	109.1	7.6	7.0
CESSNA180	2720	245768	18363	7.5	103.6	7.3	7.0
CESSNA182	13954	1566188	98979	6.3	121.7	7.4	6.1
CESSNA185	1615	304641	23400	7.7	202.2	15.1	7.5
CESSNA188	1838	429666	39154	9.1	253.7	20.6	8.1
CESSNA190	85	3163	852	26.9	47.1	11.4	24.3
CESSNA195	485	15838	3653	23.1	48.5	8.4	17.3
CESSNA205	250	16372	5818	35.5	125.2	22.3	17.8

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CESSNA206	3085	589320	85238	11.5	195.3	21.9	11.2
CESSNA207	411	226381	33226	14.7	600.8	84.6	14.1
CESSNA210	6355	887013	72967	8.2	143.1	11.5	8.1
CESSNA303	180	43700	8829	20.2	250.9	49.5	19.7
CESSNA305	278	41882	24723	59.0	208.7	117.2	56.7
CESSNA310	3237	530252	53986	10.2	189.7	18.2	9.8
CESSNA320	330	36213	2577	7.1	120.0	7.4	6.2
CESSNA335	52	12490	2222	17.8	240.2	42.7	17.8
CESSNA336	90	5399	1734	32.1	64.3	19.8	30.9
CESSNA337	1253	160325	24272	15.1	145.5	19.9	13.7
CESSNA340	988	186602	29973	16.1	211.2	31.1	14.7
CESSNA401	240	31146	8610	27.6	133.4	36.1	27.1
CESSNA402	709	429487	79705	18.6	614.2	112.7	18.3
CESSNA404	165	42314	24619	58.7	260.3	151.9	58.4
CESSNA411	158	17297	6978	40.3	122.7	45.1	38.8
CESSNA414	804	203576	23829	11.7	253.2	29.6	11.7
CESSNA421	1308	244936	46638	19.0	208.8	37.5	18.0
CESSNA425	165	47799	7083	14.8	297.1	42.7	14.4
CESSNA441	248	74070	11753	15.9	298.7	47.4	15.9
CESSNA500	547	189284	19998	10.6	346.0	36.6	10.6
CESSNA501	54	11652	1929	16.6	221.6	35.6	16.1

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CESSNA850	49	15175	1995	13.1	309.7	40.7	13.1
CESSNA750	67	146	103	70.8	10.2	3.2	32.0
CESSNAUC34	35	746	288	38.4	63.9	11.3	17.7
CHILD S1	62	6180	1542	25.0	121.3	27.3	22.5
CHILD S2	175	16813	2628	15.6	104.1	15.1	14.5
CNDALRCL600	67	40572	7398	18.2	605.5	110.4	18.2
CONWTH185	107	1927	670	34.8	43.5	10.0	23.1
CONAERLA4	491	35858	6728	18.9	82.9	13.4	16.2
CURTISC46	50	3438	2808	75.9	249.0	130.9	52.6
CURTISJR	24	71	27	38.2	12.5	2.1	17.0
CURTISROBIN	37	63	45	71.6	11.0	0.0	0.0
CURTISTRVAIR	185	687	717	104.4	38.0	18.0	47.3
CVAC 22	35	0	0	0.0	0.0	0.0	0.0
CVAC 240	34	127	191	149.7	60.0	0.0	0.0
CVAC 340	20	0	0	0.0	0.0	0.0	0.0
CVAC 440	23	321	107	33.3	20.0	0.0	0.0
CVAC BT13	100	1289	689	53.4	24.2	8.7	36.0
CVAC L13	21	2	2	90.4	1.0	0.0	0.0
CVAC STC580	38	20433	5218	25.5	564.6	127.6	22.6
DART G	25	320	102	31.8	29.9	1.2	3.9
DHAV DMC1	88	4426	721	16.3	64.3	8.9	13.9

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DHAV DHC2	284	22831	7432	32.6	118.1	31.4	27.1
DHAV DHC3	25	3378	898	26.5	245.9	37.6	15.3
DHAV DHC8	75	86570	14285	16.5	1206.5	185.3	15.4
DHAVXXDH2	78	3032	710	23.4	48.8	8.9	18.3
DOUG A26	27	884	211	24.4	40.8	7.5	18.4
DOUG DC10	28	93288	0	0.0	3331.0	0.0	0.0
DOUG DC3	373	83485	43126	51.7	300.8	139.4	46.4
DOUG DC4	84	8238	4394	70.4	88.5	58.2	65.7
DOUG DC8	111	35258	15122	42.9	425.9	139.2	32.7
DOUG DC7	39	1603	471	29.4	91.2	15.8	17.3
DOUG DC8	88	0	0	0.0	0.0	0.0	0.0
DOUG DC9	61	72519	48665	64.3	2311.8	980.2	42.4
EAGLE DW	79	16878	3870	21.7	213.8	48.5	21.7
EAGLE8C7	41	2701	470	17.4	70.3	11.5	16.3
EIRVON20	114	8374	1889	26.2	58.7	14.7	25.0
ENAIR MA1	20	2782	1579	56.8	255.0	91.7	36.0
EMB 110	57	108459	27353	25.2	2122.3	381.2	18.0
ENSTRM280	137	35532	14580	41.0	309.2	119.6	38.7
ENSTRMF28	312	48168	13278	28.8	174.5	48.6	27.9
FLEET 168	23	209	77	36.8	23.6	4.3	18.3
FRCHLD24	285	2048	917	44.8	24.3	8.1	33.5



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FRCHLDC119	34	387	108	28.3	12.0	0.0	0.0
FRCHLDF27	30	15141	2912	19.2	504.7	97.1	19.2
FRCHLDFH1100	81	1867	1887	101.2	89.2	21.1	23.7
FRCHLDM82	224	12217	5151	42.2	87.8	30.7	35.1
GENBALAX6	88	2235	402	18.0	41.2	8.2	15.0
GLASFL201	36	1394	259	18.6	42.8	7.5	17.5
GLASFLH301	116	8752	3694	42.2	84.8	34.7	40.9
GR08 103CAT	59	8749	1330	15.2	160.8	23.0	14.3
GR08 109	53	4344	480	11.1	84.5	9.0	10.7
GR08 ASTIR	63	5553	972	17.5	102.1	18.4	18.1
GRTLKS2T1	188	4308	2196	51.0	45.7	19.9	43.5
GRUMAVAA1	587	49341	15770	32.0	89.5	27.9	31.2
GRUMAVAA5	1063	129288	23808	18.4	125.9	22.8	18.1
GRUMAVG1159	41	19328	2991	15.5	471.4	73.0	15.5
GRUMAVG184	1288	353946	32458	9.2	324.9	24.3	7.5
GRUMAVG21	52	7511	2890	38.5	256.5	65.3	25.5
GRUMAVT8M	33	232	112	48.2	15.4	4.5	29.4
GULSTM112	695	63051	10151	16.1	110.6	13.9	12.5
GULSTM500	325	88109	14736	16.7	329.6	53.2	16.1
GULSTM520	58	1517	880	58.0	52.6	21.6	41.1
GULSTM580	122	6310	4210	66.7	169.3	45.4	26.8

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GULSTM880	321	32345	12796	39.6	149.7	53.5	35.7
GULSTM880TP	118	21113	8368	30.2	243.3	49.0	20.1
GULSTM890TC	30	11381	1363	12.0	379.4	45.4	12.0
GULSTM890TP	499	167428	29423	17.6	335.5	59.0	17.6
GULSTMAA1	610	39805	8841	22.2	73.2	16.0	21.8
GULSTMAA5	653	85821	9907	15.1	108.4	15.1	13.9
GULSTMG1159	189	57173	7995	14.0	338.3	47.3	14.0
GULSTMG159	125	86050	18342	21.3	688.4	146.7	21.3
GULSTMG44	81	5925	1750	29.5	86.2	16.3	18.9
GULSTMG73	28	6758	2807	41.5	266.2	107.4	40.3
GULSTMGA7	58	6621	1255	19.0	125.6	21.2	16.9
H-1	145	9604	5428	56.5	107.8	54.3	50.4
H13/HTL	79	5528	2825	51.1	205.3	79.6	38.8
H19/45	77	3285	3320	101.1	255.2	56.1	22.0
H23/HTE	145	4919	5940	120.8	335.0	163.1	48.7
H34/55	63	1217	1313	107.9	270.5	24.0	8.9
H37	47	0	0	0.0	0.0	0.0	0.0
HELIO H295	102	7047	2394	34.0	140.1	28.2	20.1
HELIO H391	23	362	148	40.8	36.0	10.7	29.6
HELIO H395	21	1522	542	35.6	145.0	26.0	17.9
HILLERUH12	496	29812	18095	64.1	175.3	79.4	45.3

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
HUGHES269	729	130023	29462	22.7	277.2	50.5	18.2
HUGHES369	678	264781	30871	11.7	438.6	48.3	11.0
HWKSLYDH104	32	155	259	168.3	51.0	30.6	60.0
HWKSLYDH125	193	68342	6754	9.9	354.1	35.0	9.9
INTRCP200	30	1517	389	26.3	53.5	13.3	24.9
ISRAEL1121	107	23723	5808	24.5	254.6	52.3	20.5
ISRAEL1123	26	2480	405	16.3	106.0	12.4	11.7
ISRAEL1124	191	47003	6642	16.4	246.1	45.2	18.4
J8MSTRDGA15	81	172	183	106.1	19.5	4.7	24.3
LAIKFN10	37	84	43	51.4	16.7	2.6	15.5
LEAR 23	60	11743	2367	20.2	219.2	36.0	16.4
LEAR 24	172	37641	10336	27.5	300.9	66.0	21.9
LEAR 25	263	86491	8943	10.3	331.3	33.4	10.1
LEAR 35	409	162488	13334	8.2	397.3	32.6	8.2
LEAR 55	80	32987	5500	16.7	412.3	68.7	16.7
LET L13	173	13971	2993	21.4	87.2	17.9	20.5
LKHEED1011	17	0	0	0.0	0.0	0.0	0.0
LKHEED12A	21	183	94	51.3	20.3	7.5	36.9
LKHEED1329	95	15565	6279	40.3	202.6	73.3	36.2
LKHEED18	64	2444	972	39.8	52.5	13.5	25.7
LKHEEDPV1	36	0	0	0.0	0.0	0.0	0.0

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LKHEEDT33	48	0	0	0.0	0.0	0.0	0.0
LUSCOM8	2165	72032	7013	9.7	58.8	4.8	8.4
MARTIN404	24	0	0	0.0	0.0	0.0	0.0
MAULE M4	275	12390	3011	24.3	51.0	11.6	22.8
MAULE M5	449	35867	3907	11.0	83.5	8.7	10.4
MAULE M6	68	10148	1308	12.9	155.2	18.9	12.2
M88 B0105	107	30241	7801	25.8	282.8	72.9	25.8
MCLISHFUNK8	141	2250	590	26.2	28.6	4.7	16.4
MEYERSOTW	52	1155	235	20.3	33.0	5.2	15.7
MNCOLUP90	68	1864	708	38.0	57.4	16.1	28.1
MNMITEM18	149	1206	560	46.5	23.2	6.5	28.2
MOOFD47	69	19823	10362	52.3	308.6	159.1	51.6
MOOFDUH12	21	1617	1109	68.6	256.7	72.1	28.1
MOONEYN20	6122	712662	61014	8.6	125.0	10.3	8.2
MRCHTIS205	45	2388	375	15.7	68.8	7.2	10.8
MTSBSIMJ2	365	77742	17905	23.0	236.9	50.8	21.4
MTSBSIMJ300	77	17225	4201	24.4	228.8	53.9	23.8
MJLTCO16	46	2453	552	22.5	72.4	13.4	18.5
NAMER 825	55	1369	405	29.6	49.2	7.3	14.8
NAMER F51	137	3307	1521	46.0	51.3	12.9	25.2
NAMER NA260	60	3139	844	26.9	94.8	15.7	16.5

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
NAHER T8	538	18245	6357	34.8	60.4	13.2	21.9
NATBAL752	20	639	99	15.5	32.0	5.0	15.5
NAVAL N3N	142	3489	904	25.9	43.0	6.7	15.7
NAVIONNAVION	573	14772	3315	22.4	42.7	8.8	18.0
NORD SV4	45	487	488	98.0	52.0	25.3	48.6
NORWST85	58	1657	621	37.5	41.5	13.8	33.1
OTHEXWILPIST	23	239	169	70.8	52.0	0.0	0.0
PARTENP88	48	17885	2388	13.4	400.9	45.3	11.3
PICARDAX8	153	2204	272	12.3	24.1	2.4	10.1
PILATS84	25	2248	405	18.0	89.9	18.2	18.0
PIPER 600	403	113340	21988	19.4	281.2	54.6	19.4
PIPER E2	20	205	117	58.9	23.4	11.6	49.3
PIPER J2	56	182	79	43.4	18.6	3.9	20.9
PIPER J3	4148	98996	12830	13.0	50.5	4.7	9.3
PIPER J4	243	3710	1213	32.7	33.6	7.0	20.7
PIPER J5	356	38775	27833	71.8	232.0	158.7	68.4
PIPER PA12	1344	82049	12640	15.4	96.5	13.5	14.0
PIPER PA14	105	7440	2280	30.6	113.1	29.2	25.9
PIPER PA15	188	4606	988	21.0	36.8	4.9	13.2
PIPER PA16	360	15558	3875	24.9	55.9	12.7	22.8
PIPER PA17	113	2360	729	30.9	49.0	8.8	18.0

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PIPER PA18	3532	442528	76959	17.4	147.2	24.4	16.6
PIPER PA20	446	17522	5290	30.2	55.0	14.3	26.0
PIPER PA22	4893	244834	37318	15.2	72.6	10.9	15.0
PIPER PA23	3517	435028	53672	12.3	158.7	17.5	11.0
PIPER PA24	3215	299706	25105	8.4	100.2	7.8	7.8
PIPER PA25	1355	228435	28557	12.6	186.0	20.8	11.2
PIPER PA28	22711	2951927	194441	6.6	138.1	9.0	6.5
PIPER PA30	1283	153114	18511	12.1	132.2	14.8	11.2
PIPER PA31	2131	755598	70658	9.3	367.6	32.6	8.9
PIPER PA31T	616	190052	28187	14.8	308.5	45.8	14.8
PIPER PA32	4527	747618	78554	10.5	175.1	17.8	10.2
PIPER PA34	2225	546741	83258	15.2	256.5	37.8	14.7
PIPER PA36	407	98009	11486	11.7	247.5	28.2	11.4
PIPER PA38	1563	518018	68690	13.3	345.6	45.1	13.0
PIPER PA42	88	28382	3165	11.2	322.3	36.0	11.2
PIPER PA44	352	71593	7809	10.9	219.2	23.3	10.6
PIPER PA46	84	13104	1840	12.5	158.1	19.3	12.2
PRATT PRG1	20	127	79	62.2	22.3	4.2	18.8
PROPTJ200	69	4634	1879	40.5	73.0	28.8	39.5
RAVEN RX6	208	4105	1057	25.8	36.6	6.2	16.9
RAVEN S50	87	901	359	39.9	17.1	5.3	31.1

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
RAVEN S55	782	31542	2529	8.0	48.4	3.6	7.7
RAVEN S80	157	9401	3217	34.2	61.8	21.0	34.0
RAVEN S88	38	2019	281	13.9	58.5	7.4	12.7
RKWE1500	39	10824	2499	23.5	272.4	64.1	23.5
RKWE1700	24	19207	10855	56.5	933.7	508.4	54.4
RKWE1NA285	348	118313	12089	10.4	338.2	35.0	10.4
ROBSINR22	258	88908	28745	32.3	380.5	113.9	31.8
ROLSCHLS	114	11833	1515	12.8	114.1	12.5	10.9
RYAN ST3	181	4877	1494	30.6	43.0	10.5	24.5
RYAN STA	34	818	284	48.1	24.2	9.9	41.0
SCHLERASW15	38	2289	302	13.2	83.6	8.4	13.2
SCHLERASW19	54	3791	583	15.4	74.0	11.1	14.9
SCHLERASW20	98	9593	1224	12.8	105.4	12.7	12.1
SCHLERK8	22	1201	269	22.4	58.0	12.7	21.9
SCHLERKA8	74	2152	312	14.5	38.3	3.9	10.2
SCWZERG164	248	57539	5583	9.7	241.2	22.4	9.3
SCWZERSG1	782	28789	7272	27.1	49.9	12.8	25.7
SCWZERSG2	590	58103	18300	28.1	138.3	34.5	25.3
SEMCO CLINGER	27	179	152	85.1	28.5	14.3	54.0
SEMCO MODEL T	29	58	55	94.8	12.0	0.0	0.0
SKRSKYSS5	30	1409	592	42.0	108.7	20.9	19.6

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
SKRSKY58	63	2303	1518	65.9	82.2	41.7	50.6
SKRSKY576	138	57126	20088	35.2	414.0	145.6	35.2
SLINDS100	316	12416	3570	28.8	63.8	13.6	21.2
SMITH 600	373	74011	7407	10.0	210.3	20.5	9.7
SNIAS AS350	246	82128	14553	17.7	380.0	51.5	14.3
SNIAS AS355	146	101231	10486	10.4	683.4	71.8	10.4
SNIAS SA318	27	2412	42	1.7	89.3	1.6	1.7
SNIAS SA341	45	2356	1048	44.5	94.9	29.0	30.6
SOCATANS884	40	2273	380	16.7	62.5	8.9	14.2
SOCATALLYE	20	1341	200	14.9	71.2	9.2	12.9
SPARTHICIRBUS	104	5270	908	17.2	60.9	9.6	15.8
SPARTHINIBUS	52	2667	467	17.5	66.0	8.7	13.2
SPARTHVENTUS	50	3981	509	12.8	83.6	10.1	12.1
STBROSS03	31	70402	3266	4.6	2271.0	105.3	4.6
STINSON10	157	1062	623	58.7	53.6	7.8	14.5
STINSONL5	131	4059	1649	40.8	63.5	18.6	29.3
STINSONSR9	26	241	105	43.6	27.8	10.0	35.8
STINSONV77	105	1151	916	79.6	56.8	35.4	62.2
STOLAMRC3	224	3206	1419	44.2	34.6	10.4	30.1
SUPAC LA	99	266	122	45.7	17.1	4.5	26.5
SUPAC V	29	116	63	54.5	16.0	6.5	40.7



TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
SWRNGNSA226	166	96194	14028	14.6	575.2	81.2	14.1
SWRNGNSA227	75	23065	5323	23.1	307.5	71.0	23.1
SWRNGNSA26	104	29814	6472	21.7	298.0	61.2	20.5
TCRAFK21	20	3524	954	27.1	176.2	47.7	27.1
TCRAFKD	288	3580	1623	45.3	55.3	8.2	14.8
TCRAFTA	30	77	72	92.6	67.0	0.0	0.0
TCRAFT8C	1844	35001	5394	15.4	32.3	3.7	11.4
TCRAFTBF	40	1217	391	32.1	70.5	12.0	17.1
TCRAFTBL	231	1134	858	75.7	25.8	14.4	55.8
TEMCO 11A	30	469	130	27.8	33.8	4.7	14.0
TH55	43	2660	852	32.0	106.4	26.1	24.5
THUNDRA7	55	1498	619	41.3	30.9	11.7	37.7
TMPSONNAVION	642	35812	8950	25.0	82.6	20.1	24.3
TOMCAT	37	7892	1309	16.6	255.9	25.5	10.0
TRYTEK65	349	2393	1236	51.7	23.8	8.4	35.5
TRYTEKK	33	161	88	54.7	30.5	11.1	36.3
UNIVACGC1	664	21415	3807	17.8	56.0	6.8	12.2
UNIVAR108	2009	64200	10414	16.2	47.6	6.2	13.0
UNIVAR415	2409	82117	13735	16.7	54.0	8.2	15.2
VARGA 2150	132	7921	1703	21.5	65.1	12.8	19.7
VICKER745	21	4387	732	16.7	221.9	6.1	2.7

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
WACO ASO	30	355	175	49.4	43.3	10.3	23.7
WACO GXE	36	308	188	54.8	47.8	18.2	34.0
WACO R	30	168	45	26.8	11.2	1.9	17.4
WACO U	20	258	110	42.9	72.7	1.2	1.7
WACO UPF7	184	4008	1298	32.4	57.2	14.9	26.0
WACO YK	55	408	256	62.9	46.6	20.5	44.0
WSK M18	40	7854	1489	18.7	204.4	37.3	18.2
WTHRLY201	88	12874	1887	13.1	217.4	23.4	10.8
TOTAL	267429	36118818	561921	1.6	158.1	2.5	1.6

TABLE 2 - 8

GENERAL AVIATION ACTIVE AIRCRAFT  
BY  
TYPE OF AIRCRAFT  
1984

PAGE 1 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
<b>FIXED WING</b>						
<b>FIXED WING - PISTON</b>						
1 ENG: 1-3 SEATS	88532	61989	723	1.2	71.6	0.8
1 ENG: 4+ SEATS	121984	109933	603	0.5	90.1	0.5
1 ENGINE: TOTAL	208516	171922	942	0.5	82.5	0.5
2 ENG: 1-6 SEATS	18930	16539	231	1.4	87.4	1.2
2 ENG: 7+ SEATS	10180	8719	193	2.2	85.6	1.9
2 ENGINE: TOTAL	29109	25258	301	1.2	86.8	1.0
PISTON: OTHER	392	262	35	13.2	66.8	8.9
PISTON: TOTAL	238017	197442	989	0.5	83.0	0.4
<b>FIXED WING - TURBOPROP</b>						
2 ENG: 1-12 SEATS	5131	4992	47	0.9	97.3	0.9
2 ENG: 13+ SEATS	691	640	29	4.5	92.7	4.1
2 ENGINE: TOTAL	5822	5633	55	1.0	96.7	0.9
TURBOPROP: OTHER	195	176	15	8.6	90.5	7.7
TURBOPROP: TOTAL	6017	5809	57	1.0	96.5	1.0

TABLE 2 - 6

GENERAL AVIATION ACTIVE AIRCRAFT  
BY  
TYPE OF AIRCRAFT  
1984

PAGE 2 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3948	3780	50	1.3	95.8	1.3
TURBOJET: OTHER	900	540	45	8.3	80.0	5.0
TURBOJET: TOTAL	4848	4320	67	1.6	89.1	1.4
FIXED WING: TOTAL	248880	207571	993	0.5	83.4	0.4
ROTORCRAFT						
PISTON	5516	2936	185	6.3	53.2	3.4
TURBINE	4774	4160	115	2.8	87.1	2.4
ROTORCRAFT: TOTAL	10290	7096	218	3.1	89.0	2.1
OTHER	8259	6275	171	2.7	78.0	2.1
TOTAL	287429	220843	1032	0.5	82.8	0.4

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT  
BY  
STATE OF BASED AIRCRAFT  
1984

PAGE 1 OF 3

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALABAMA	3886	411	3234	381	83.2	13.2
ALASKA	8741	519	7684	490	87.9	7.7
ARIZONA	8415	513	5177	479	80.7	9.9
ARKANSAS	3266	353	2920	338	89.4	14.2
CALIFORNIA	36477	1143	30494	1070	83.6	3.9
COLORADO	5810	492	5180	469	89.1	11.1
CONNECTICUT	2152	289	1863	283	86.6	17.8
DELAWARE	723	167	533	144	73.7	26.3
DIST. OF COLUMBIA	45	35	31	28	69.5	83.6
FLORIDA	14922	773	12720	722	85.2	6.5
GEORGIA	5406	472	4450	437	82.3	10.8
HAWAII	588	158	463	143	78.8	32.3
IDAH0	2764	344	2328	322	84.3	15.7
ILLINOIS	10334	662	9087	633	87.9	8.3
INDIANA	4772	445	3797	394	79.6	11.1
IOWA	3942	409	3416	384	86.7	13.3
KANSAS	4583	435	3713	398	81.0	11.6
KENTUCKY	1972	299	1802	289	91.4	20.2
LOUISIANA	5045	435	4627	419	91.7	11.5
MAINE	1271	226	1055	206	83.0	21.9
MARYLAND	3354	379	2870	356	85.6	14.4

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT  
BY  
STATE OF BASED AIRCRAFT  
1984

PAGE 2 OF 3

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MASSACHUSETTS	3777	404	3318	384	87.8	13.8
MICHIGAN	8692	598	7088	548	81.3	8.4
MINNESOTA	6098	487	5139	458	84.3	10.1
MISSISSIPPI	2800	332	2082	300	80.1	15.4
MISSOURI	5237	474	4398	444	84.0	11.4
MONTANA	2898	341	2472	330	91.6	18.8
NEBRASKA	2075	293	1805	278	87.0	18.2
NEVADA	2024	287	1823	277	90.1	18.7
NEW HAMPSHIRE	1818	255	1298	236	80.2	19.3
NEW JERSEY	4703	439	4041	413	85.9	11.9
NEW MEXICO	2870	338	2300	303	80.1	14.1
NEW YORK	7885	569	6599	531	83.9	9.1
NORTH CAROLINA	4807	458	4412	441	91.8	12.7
NORTH DAKOTA	1910	289	1572	284	82.3	18.6
OHIO	9015	612	7553	572	83.8	8.5
OKLAHOMA	6137	516	5345	489	87.1	10.8
OREGON	8029	499	5032	462	83.5	10.3
PENNSYLVANIA	7808	548	6205	509	81.6	8.9
RHODE ISLAND	436	139	398	135	90.9	42.4
SOUTH CAROLINA	1954	281	1681	273	85.0	18.9
SOUTH DAKOTA	1842	268	1393	247	84.9	20.5

TABLE 2 - 7  
GENERAL AVIATION ACTIVE AIRCRAFT  
BY  
STATE OF BASED AIRCRAFT  
1984

PAGE 3 OF 3

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
TENNESSEE	3349	383	2884	380	86.1	14.6
TEXAS	23335	949	19941	891	85.5	5.2
UTAH	1439	251	1337	245	92.9	23.5
VERMONT	607	148	466	127	76.7	28.1
VIRGINIA	3619	393	3137	371	86.7	13.9
WASHINGTON	8123	573	6665	525	82.1	8.7
WEST VIRGINIA	1176	221	880	168	74.9	21.3
WISCONSIN	5392	472	4180	425	77.5	10.4
WYOMING	1649	269	1474	259	89.4	21.4
PUERTO RICO	467	140	422	134	90.4	39.4
OTHER U.S. TERRITORIES	93	63	76	55	82.1	81.3
FOREIGN	1918	272	1489	241	76.6	16.6
TOTAL	267429		220943	1032	82.6	0.4

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 8  
GENERAL AVIATION ACTIVE AIRCRAFT  
BY  
REGION OF BASED AIRCRAFT  
1984

REGION	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALASKAN	8741	519	7684	490	87.9	7.7
CENTRAL	15836	788	13331	748	84.2	6.3
EASTERN	29082	1038	24297	973	83.5	4.5
EUROPEAN OFFICE	618	183	527	154	85.3	33.5
GREAT LAKES	47854	1290	39788	1212	83.1	3.4
NEW ENGLAND	9860	831	8393	591	85.1	8.1
NORTHWEST MT.	28544	1034	24502	974	85.8	4.6
SOUTHERN	39907	1204	34007	1132	85.2	3.8
SOUTHWESTERN	40935	1196	35341	1131	86.3	3.7
WESTERN-PACIFIC	48037	1256	38414	1181	83.4	3.4
TOTAL	267429		220943	1032	82.6	0.4

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.



TABLE 2 - 9

GENERAL AVIATION AIRCRAFT  
BY AIRCRAFT TYPE AND PRIMARY USE  
1984

PAGE 1 OF 3

AIRCRAFT TYPE	ACTIVE USE												IN- ACTIVE
	TOTAL ACTIVE	EXECU- TIVE	BUSI- NESS	PER- SONAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	
FIXED WING													
FIXED WING - PISTON													
1 ENG: 1-3 SEATS													
EST.NO. ACTIVE	61989	50	3104	39143	7882	6145	1434	489	0	0	1622	2119	24543
% STD. ERROR	1.2	*	11.2	1.8	6.9	2.7	17.9	25.3	0.0	0.0	15.8	15.2	
EST. % ACTIVE	71.6												
1 ENG: 4+ SEATS													
EST.NO. ACTIVE	109933	3000	31903	57495	5888	229	2387	345	137	2026	424	6100	12051
% STD. ERROR	0.5	11.7	3.1	1.9	8.9	41.0	13.5	35.2	42.0	14.0	30.8	8.8	
EST. % ACTIVE	90.1												
1 ENGINE: TOTAL													
EST.NO. ACTIVE	171922	3048	35007	96638	13771	6374	3821	834	137	2026	2048	8219	36594
% STD. ERROR	0.5	11.6	3.0	1.3	5.5	3.0	10.8	20.8	42.0	14.0	14.0	7.6	
EST. % ACTIVE	82.5												
2 ENG: 1-6 SEATS													
EST.NO. ACTIVE	16539	2812	7754	3238	363	46	193	0	179	1299	380	276	2391
% STD. ERROR	1.4	9.0	4.3	8.2	23.6	*	37.5	0.0	41.2	14.0	25.6	25.2	
EST. % ACTIVE	87.4												
2 ENG: 7+ SEATS													
EST.NO. ACTIVE	8719	2710	2651	472	140	192	145	42	484	1548	129	196	1461
% STD. ERROR	2.2	9.4	10.4	28.7	*	41.2	35.3	*	22.1	15.8	49.6	44.4	
EST. % ACTIVE	85.6												
2 ENGINE: TOTAL													
EST.NO. ACTIVE	25258	5522	10405	3710	502	237	338	42	663	2845	509	472	3851
% STD. ERROR	1.2	6.5	4.2	8.0	25.1	35.6	26.2	*	19.6	10.7	22.9	23.6	
EST. % ACTIVE	86.8												
PISTON: OTHER													
EST.NO. ACTIVE	262	43	23	3	0	68	2	5	2	53	5	60	130
% STD. ERROR	13.3	*	*	*	0.0	49.4	*	*	*	38.9	*	44.3	
EST. % ACTIVE	66.8												
PISTON: TOTAL													
EST.NO. ACTIVE	197442	8614	45435	100352	14273	6679	4161	881	801	4925	2560	8751	40575
% STD. ERROR	0.5	5.8	2.5	1.3	5.4	3.2	10.1	20.2	17.7	8.5	12.1	7.3	
EST. % ACTIVE	83.0												

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT  
BY AIRCRAFT TYPE AND PRIMARY USE  
1984

PAGE 2 OF 3

AIRCRAFT TYPE	ACTIVE USE												
	TOTAL ACTIVE	EXECU- TIVE	BUSI- NESS	PER- SONAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	IN- ACTIVE
FIXED WING - TURBOPROP													
2 ENG: 1-12 SEATS													
EST.NO. ACTIVE	4992	3376	712	89	0	0	29	45	50	498	163	31	139
% STD. ERROR	1.0	4.5	16.3	*	0.0	0.0	27.5	*	*	21.3	33.1	*	
EST. % ACTIVE	97.3												
2 ENG: 13+ SEATS													
EST.NO. ACTIVE	640	239	5	0	10	0	13	3	326	17	25	3	51
% STD. ERROR	4.5	11.8	*	0.0	*	0.0	*	*	11.3	*	*	*	
EST. % ACTIVE	92.7												
2 ENGINE: TOTAL													
EST.NO. ACTIVE	5633	3616	717	89	10	0	42	47	376	515	188	33	189
% STD. ERROR	1.0	4.3	16.2	*	*	0.0	42.4	*	12.3	20.7	30.6	*	
EST. % ACTIVE	96.7												
TURBOPROP: OTHER													
EST.NO. ACTIVE	176	21	20	0	0	75	3	0	0	0	56	1	19
% STD. ERROR	8.6	39.9	*	0.0	0.0	0.0	*	0.0	0.0	0.0	35.0	*	
EST. % ACTIVE	90.5												
TURBOPROP: TOTAL													
EST.NO. ACTIVE	5809	3637	737	89	10	75	44	47	376	515	244	34	208
% STD. ERROR	1.0	4.3	16.0	*	*	0.0	43.4	*	12.3	20.7	24.9	*	
EST. % ACTIVE	98.5												
FIXED WING - TURBOJET													
2 ENGINE TURBOJET													
EST.NO. ACTIVE	3780	3018	223	71	3	0	0	0	21	329	113	3	162
% STD. ERROR	1.3	3.4	28.0	*	*	0.0	0.0	0.0	*	22.3	37.9	*	
EST. % ACTIVE	95.9												
TURBOJET: OTHER													
EST.NO. ACTIVE	540	230	43	1	7	0	0	0	28	3	190	13	360
% STD. ERROR	8.3	14.7	*	*	*	0.0	0.0	0.0	0.0	*	20.3	*	
EST. % ACTIVE	60.0												
TURBOJET: TOTAL													
EST.NO. ACTIVE	4320	3248	266	72	11	0	0	0	49	332	303	17	522
% STD. ERROR	1.6	3.3	24.8	49.7	*	0.0	0.0	0.0	24.7	22.2	19.0	*	
EST. % ACTIVE	89.2												

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT  
BY AIRCRAFT TYPE AND PRIMARY USE  
1984

PAGE 3 OF 3

AIRCRAFT TYPE	ACTIVE USE												IN- ACTIVE
	TOTAL ACTIVE	EXECU- TIVE	BUSI- NESS	PER- SONAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMPUTER CARRIER	AIR TAXI	OTHER	RENTAL	
FIXED WING: TOTAL													
EST. NO. ACTIVE	207571	15499	48438	100513	14294	6754	4205	928	1225	5772	3106	8802	41305
% STD. ERROR	0.5	3.5	2.4	1.3	5.4	3.1	10.0	19.4	12.2	7.6	10.3	7.2	
EST. % ACTIVE	83.4												
ROTORCRAFT													
PISTON													
EST. NO. ACTIVE	2936	154	263	645	469	369	509	10	0	32	462	23	2580
% STD. ERROR	6.3	42.4	22.3	16.4	21.2	23.9	21.1	*	0.0	*	23.4	*	
EST. % ACTIVE	53.2												
TURBINE													
EST. NO. ACTIVE	4160	881	278	60	64	209	330	145	7	1476	641	72	614
% STD. ERROR	2.8	16.2	26.8	*	*	40.3	28.4	34.1	*	12.0	20.7	*	
EST. % ACTIVE	87.1												
ROTORCRAFT: TOTAL													
EST. NO. ACTIVE	7096	1035	541	705	533	578	840	155	7	1504	1104	96	3184
% STD. ERROR	3.1	15.1	17.6	16.0	20.1	21.1	17.0	32.4	*	12.0	15.5	*	
EST. % ACTIVE	69.0												
OTHER													
EST. NO. ACTIVE	6275	141	119	4091	460	0	128	244	0	16	567	509	1983
% STD. ERROR	2.7	47.9	32.9	4.1	17.7	0.0	33.8	26.7	0.0	*	19.7	19.1	
EST. % ACTIVE	76.0												
TOTAL													
EST. NO. ACTIVE	220943	16675	47088	105309	15287	7332	5173	1328	1232	7292	4777	9406	46482
% STD. ERROR	0.5	3.4	2.4	1.3	5.1	3.3	8.7	14.9	12.2	6.5	8.0	6.9	
EST. % ACTIVE	82.6												

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.  
ROW SUMMATIONS MAY DIFFER FROM PRINTED TOTALS BECAUSE SOME ACTIVE AIRCRAFT DID NOT REPORT USE.

TABLE 2 - 10

GENERAL AVIATION ACTIVE AIRCRAFT  
IFR FLOWN AND TRANSPONDER EQUIPPED  
1984

PAGE 1 OF 2

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	4087	11.2	6.6	3842	12.0	88.9
1 ENG: 4+ SEATS	51534	2.2	48.9	50611	2.2	98.2
1 ENGINE: TOTAL	55630	2.2	32.4	54253	2.2	97.5
2 ENG: 1-6 SEATS	15368	1.9	92.9	15229	2.0	99.1
2 ENG: 7+ SEATS	8382	2.8	98.1	8359	2.8	99.7
2 ENGINE: TOTAL	23750	1.6	94.0	23588	1.6	99.3
PISTON: OTHER	157	24.6	59.9	159	24.1	100.0
PISTON: TOTAL	79537	1.6	40.3	78000	1.6	98.1
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	5098	0.5	100.0	4935	1.4	98.8
2 ENG: 13+ SEATS	880	2.1	100.0	873	2.5	99.1
2 ENGINE: TOTAL	5776	0.5	100.0	5809	1.3	97.1
TURBOPROP: OTHER	120	0.0	88.0	120	0.0	100.0
TURBOPROP: TOTAL	5896	0.5	100.0	5729	1.3	97.2

TABLE 2 - 10

GENERAL AVIATION ACTIVE AIRCRAFT  
IFR FLOWN AND TRANSPONDER EQUIPPED  
1984

PAGE 2 OF 2

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3934	0.3	100.0	3909	0.6	99.4
TURBOJET: OTHER	577	7.4	100.0	577	7.4	100.0
TURBOJET: TOTAL	4512	1.0	100.0	4486	1.1	99.4
FIXED WING: TOTAL	89944	1.4	43.3	88214	1.4	98.1
ROTORCRAFT						
PISTON	10	145.9	0.4	0	0.0	0.0
TURBINE	376	22.8	9.0	375	23.7	99.8
ROTORCRAFT: TOTAL	386	22.5	5.4	375	23.7	97.1
OTHER	107	49.4	1.7	16	83.0	15.0
TOTAL	90437	1.4	40.9	88605	1.4	98.0

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

PAGE 1 OF 18

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
OTHER 1	14004	7811	420	5.5	54.3	3.0
OTHER 2	1404	873	71	8.2	62.2	5.1
OTHER 3	335	91	35	38.8	27.0	10.5
OTHER 4	285	171	25	14.6	64.8	9.5
OTHER 5	158	91	19	20.5	57.7	11.8
OTHER 6	360	317	30	9.3	88.1	8.2
OTHER 7	190	157	26	16.5	82.4	13.6
OTHER 8	99	82	15	18.2	82.5	15.0
OTHER 9	589	515	39	7.6	90.5	6.9
OTHER 10	250	208	28	13.5	82.4	11.1
OTHER 11	1579	598	107	18.0	37.9	6.8
OTHER 12	316	170	55	32.5	53.9	17.5
OTHER 13	2289	1391	135	9.7	60.8	5.9
ADAMS A50S	103	95	7	7.0	91.8	6.4
AERORSJ2	35	10	4	46.9	27.3	12.8
AEROSPSA316	139	136	13	9.4	97.7	9.1
AGUSTA A109	54	54	0	0.0	100.0	0.0
AIRASPACE 18	22	3	3	116.3	12.5	14.5
AIRPTSA	233	82	27	33.1	35.4	11.7
AIRTRCAT300	407	354	31	8.6	87.0	7.5
AIRTRCAT400	50	50	0	0.0	100.0	0.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
AMD FALC10	143	143	0	0.0	100.0	0.0
AMD FALC20	208	205	7	3.3	98.4	3.2
AMD FALC50	100	100	0	0.0	100.0	0.0
AMTR TMK	28	2	6	225.8	9.5	21.5
ARCTICS1A	91	38	10	27.6	40.0	11.1
ARCTICS1B1	23	15	4	29.4	64.7	19.0
ARONCA15	198	184	38	22.2	82.8	18.4
ARONCA58	149	38	15	41.8	24.0	10.0
ARONCA65	147	60	17	28.6	41.1	11.8
ARONCAC3	60	17	5	31.8	27.6	8.8
AVIANW/FALCON	27	21	3	13.5	78.7	10.6
AVIANWSKYHMK	39	39	0	0.0	100.0	0.0
AYRES S2	903	722	86	12.0	79.9	9.6
BAC 111	26	26	0	0.0	100.0	0.0
BAG B206	32	29	6	20.9	92.0	19.2
BAG DH125	69	69	0	0.0	100.0	0.0
BALWKS/FIREFY	1253	1124	87	8.0	89.7	5.4
BBAVIA11	830	284	63	23.9	31.8	7.6
BBAVIA7	3488	2416	170	7.0	69.3	4.9
BBAVIA8	238	233	7	2.9	97.7	2.9
BEECH 100	275	275	0	0.0	100.0	0.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEECH 17	195	72	30	41.6	37.0	15.4
BEECH 18	887	417	122	29.3	48.2	14.1
BEECH 200	884	864	0	0.0	100.0	0.0
BEECH 23	2843	2579	73	2.8	90.7	2.6
BEECH 300	21	21	0	0.0	100.0	0.0
BEECH 33	1720	1678	34	2.0	97.4	2.0
BEECH 35	6913	6162	173	2.8	89.1	2.5
BEECH 36	2101	2072	32	1.5	98.6	1.5
BEECH 45	295	189	30	15.8	64.0	10.0
BEECH 50	338	242	42	17.5	72.2	12.6
BEECH 55	2277	2178	51	2.3	95.6	2.2
BEECH 56	64	43	8	18.5	67.6	12.5
BEECH 58	1515	1486	32	2.1	98.1	2.1
BEECH 60	429	417	17	4.1	97.3	4.0
BEECH 65	132	126	10	8.3	95.1	7.9
BEECH 76	329	321	14	4.4	97.5	4.3
BEECH 77	248	241	11	4.7	97.1	4.5
BEECH 80	180	161	26	16.3	89.5	14.6
BEECH 90	1119	1119	0	0.0	100.0	0.0
BEECH 95	467	432	34	7.9	92.6	7.4
BEECH 98	94	90	6	6.2	95.8	5.9



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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BELL 47	1280	889	105	11.8	70.6	8.3
BELL 204	25	20	4	20.0	80.0	16.0
BELL 205	25	6	8	125.2	25.0	31.3
BELL 208	2237	2059	88	4.3	92.0	3.3
BELL 212	122	122	0	0.0	100.0	0.0
BELL 222	57	55	4	7.2	96.2	6.9
BELL 412	26	26	0	0.0	100.0	0.0
BLANCA11	80	37	11	30.6	46.2	14.1
BLANCA1413	267	121	32	26.7	45.4	12.1
BLANCA1419	271	218	26	11.8	80.5	9.5
BLANCA17	1066	1023	34	3.3	96.0	3.2
BLANCA7	2352	1766	131	7.4	75.1	5.6
BLANCA8	479	442	17	3.8	92.2	3.5
BNORM BN2	115	82	6	7.1	71.1	5.0
BOEING707	78	12	15	123.8	16.0	19.8
BOEING720	24	24	0	0.0	100.0	0.0
BOEING727	109	63	28	45.4	57.5	26.1
BOEING737	15	15	0	0.0	100.0	0.0
BOEING747	30	30	0	0.0	100.0	0.0
BOEING75	1915	617	116	18.7	32.2	6.0
BOEING767	4	0	0	0.0	0.0	0.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BOLKOWS 117	23	15	5	37.1	64.3	23.9
BRANTLY B2	128	56	20	35.0	43.6	15.3
BRASOVIS 28	51	45	4	7.8	88.3	6.9
BRWSTRFLEET2	28	12	3	25.4	44.5	11.3
BRWSTRFLEET7	23	8	3	36.7	35.7	13.1
BUKER 131	30	6	5	74.1	21.4	15.9
CANON MODELO	186	188	18	10.7	90.5	9.7
CESSNA 120	876	457	90	19.6	52.1	10.2
CESSNA 140	2358	1656	130	7.8	70.2	5.5
CESSNA 150	19858	17864	330	1.8	90.0	1.7
CESSNA 170	2473	1965	132	6.7	79.5	5.3
CESSNA 172	25365	23883	285	1.2	94.2	1.1
CESSNA 175	1325	1198	69	5.8	90.4	5.2
CESSNA 177	2891	2745	57	2.1	95.0	2.0
CESSNA 180	2720	2372	59	2.5	87.2	2.2
CESSNA 182	13954	12873	225	1.8	92.3	1.6
CESSNA 185	1615	1508	26	1.7	93.3	1.6
CESSNA 188	1838	1693	70	4.1	92.1	3.8
CESSNA 190	85	67	8	11.7	79.0	9.3
CESSNA 195	485	326	50	15.2	67.3	10.3
CESSNA 205	250	131	40	30.7	52.3	16.1

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSNA208	3065	2915	88	2.3	95.1	2.2
CESSNA207	411	377	18	4.1	91.6	3.8
CESSNA210	6355	6199	100	1.6	97.5	1.6
CESSNA303	180	174	8	4.3	98.8	4.2
CESSNA305	278	203	33	16.4	72.9	12.0
CESSNA310	3237	2795	94	3.4	88.3	2.9
CESSNA320	330	302	11	3.5	91.4	3.2
CESSNA335	52	52	0	0.0	100.0	0.0
CESSNA336	90	84	7	8.9	93.3	8.3
CESSNA337	1253	1102	72	6.5	87.9	5.8
CESSNA340	988	884	58	8.4	91.3	5.8
CESSNA401	240	234	13	5.5	97.3	5.3
CESSNA402	709	699	20	2.8	98.7	2.8
CESSNA404	165	163	10	6.0	98.5	5.9
CESSNA411	158	141	23	16.6	89.2	14.8
CESSNA414	804	804	0	0.0	100.0	0.0
CESSNA421	1308	1173	74	6.3	89.7	5.7
CESSNA425	165	161	6	3.6	97.5	3.6
CESSNA441	248	248	0	0.0	100.0	0.0
CESSNA500	547	547	0	0.0	100.0	0.0
CESSNA501	54	53	2	3.9	97.4	3.8

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSNA650	49	49	0	0.0	100.0	0.0
CESSNA750	67	14	9	63.2	21.4	13.5
CESSNAUC94	35	12	4	34.1	33.3	11.4
CHILD S1	62	51	6	10.8	82.2	8.9
CHILD S2	175	162	9	5.8	92.3	5.4
CNDALRCL800	67	67	0	0.0	100.0	0.0
COMWTH185	107	44	12	26.0	41.4	10.8
CONAERLA4	491	430	41	9.7	87.6	8.5
CURTISC46	50	14	8	54.7	27.6	15.1
CURTISJR	24	6	2	34.2	23.5	8.1
CURTISROBIN	37	6	4	71.6	15.4	11.0
CURTISTRVAIR	185	18	17	93.0	9.8	9.1
CVAC 22	35	0	0	0.0	0.0	0.0
CVAC 240	34	2	3	149.7	6.2	9.4
CVAC 340	20	11	7	56.7	57.1	33.5
CVAC 440	23	16	5	33.3	71.4	23.8
CVAC BT13	100	53	21	39.5	53.3	21.0
CVAC L13	21	2	2	90.4	11.1	10.0
CVAC STC380	38	36	4	11.9	95.2	11.3
DART G	25	11	3	31.5	42.9	13.5
DHAY DMC1	88	69	6	8.8	78.2	6.7

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
DHAV DHC2	284	197	36	18.1	69.2	12.5
DHAV DHC3	25	14	3	21.7	55.1	12.0
DHAV DHC6	75	72	4	6.0	95.7	5.8
DHAVXXDH82	78	62	9	14.6	80.0	11.6
DOUG A26	27	21	3	16.1	78.6	12.7
DOUG DC10	28	28	0	0.0	100.0	0.0
DOUG DC3	373	278	63	22.8	74.4	17.0
DOUG DC4	84	70	18	25.4	83.9	21.3
DOUG DC8	111	83	23	27.8	74.6	20.7
DOUG DC7	39	18	4	23.7	45.1	10.7
DOUG DC8	88	0	0	0.0	0.0	0.0
DOUG DC9	61	31	15	48.4	51.4	24.9
EAGLE DW	79	79	0	0.0	100.0	0.0
EAGLEBC7	41	38	2	6.0	93.8	5.6
EIRVON20	114	109	9	8.0	95.2	7.6
EMAIR MA1	20	11	5	43.9	54.5	24.0
EMB 110	57	51	9	17.7	89.7	15.9
ENSTRM280	137	115	16	13.7	83.9	11.5
ENSTRMF28	312	265	19	7.1	84.8	6.0
FLEET 168	23	9	3	31.9	38.5	12.3
FRCHLD24	285	84	25	29.4	29.6	8.7

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FRCHLDC119	34	31	9	29.3	90.0	28.4
FRCHLDF27	30	30	0	0.0	100.0	0.0
FRCHLDFH1100	81	19	18	98.4	23.1	22.7
FRCHLDM82	224	139	33	23.4	62.2	14.6
GENBALAX8	68	54	5	10.0	79.7	7.9
GLASFL201	36	33	2	6.2	90.5	5.6
GLASFLH301	116	103	11	10.5	89.0	9.3
GROB 103CAT	59	54	3	5.1	92.2	4.7
GROB 109	53	51	1	2.8	97.0	2.7
GROB ASTIR	63	54	4	6.9	86.4	6.0
GRTLKS2T1	188	94	25	26.5	50.2	13.3
GRUMAVAA1	587	552	38	6.9	94.0	6.5
GRUMAVAA5	1063	1027	35	3.4	98.6	3.3
GRUMAVG1159	41	41	0	0.0	100.0	0.0
GRUMAVG184	1288	1089	58	5.3	84.6	4.5
GRUMAVG21	52	29	8	28.8	56.3	16.2
GRUMAVTBM	33	15	6	38.2	45.8	17.5
GULSTM112	695	570	58	10.1	82.1	8.3
GULSTM500	325	267	12	4.4	82.3	3.6
GULSTM520	58	29	12	41.0	49.7	20.4
GULSTM560	122	37	23	61.1	30.6	18.7

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
GULSTM880	321	218	37	17.0	67.3	11.4
GULSTM880TP	118	87	19	22.5	73.5	16.5
GULSTM890TC	30	30	0	0.0	100.0	0.0
GULSTM890TP	499	499	0	0.0	100.0	0.0
GULSTMAA1	610	543	22	4.1	89.1	3.6
GULSTMAA5	653	607	35	5.8	93.0	5.4
GULSTMG1159	169	169	0	0.0	100.0	0.0
GULSTMG159	125	125	0	0.0	100.0	0.0
GULSTMG44	81	89	16	22.7	84.9	19.3
GULSTMG73	28	25	3	9.9	90.7	9.0
GULSTMGA7	58	53	5	8.6	90.9	7.8
H-1	145	89	23	25.6	61.5	15.8
H13/HTL	79	27	9	33.3	34.1	11.3
H19/45	77	13	13	98.6	18.7	18.5
H23/HTE	145	15	18	110.5	10.1	11.2
H34/55	63	5	5	107.5	7.1	7.7
H37	47	0	0	0.0	0.0	0.0
HELIO H295	102	50	14	27.4	49.3	13.5
HELIO H391	23	10	3	28.0	43.7	12.3
HELIO H395	21	10	3	30.8	50.0	15.4
HILLERUH12	496	170	77	45.3	34.3	15.5

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
HUGHES289	729	489	63	13.5	64.3	8.7
HUGHES389	678	804	23	3.8	89.0	3.4
HAWSLYDH104	32	3	5	155.1	9.5	14.8
HAWSLYDH125	193	193	0	0.0	100.0	0.0
INTRCP200	30	28	2	8.6	94.4	8.1
ISRAEL1121	107	93	12	13.3	87.1	11.8
ISRAEL1123	28	23	3	11.4	90.0	10.3
ISRAEL1124	191	191	0	0.0	100.0	0.0
JMWSTRDGA15	81	9	9	103.3	10.9	11.3
LAIFN10	37	5	2	49.0	13.8	6.7
LEAR 23	60	54	6	11.7	89.3	10.4
LEAR 24	172	125	21	18.5	72.7	12.0
LEAR 25	263	261	6	2.3	99.3	2.3
LEAR 35	409	409	0	0.0	100.0	0.0
LEAR 55	80	80	0	0.0	100.0	0.0
LET L13	173	180	10	8.3	92.8	5.8
LKHEED1011	17	0	0	0.0	0.0	0.0
LKHEED12A	21	9	3	35.6	42.9	15.3
LKHEED1329	95	77	14	17.9	80.9	14.4
LKHEED18	64	47	14	30.3	72.7	22.0
LKHEEDPV1	36	0	0	0.0	0.0	0.0



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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
LOCKHEEDT33	46	0	0	0.0	0.0	0.0
LUSCOMB	2165	1288	61	4.8	58.6	2.8
MARTINA04	24	0	0	0.0	0.0	0.0
MAULE M4	275	243	20	8.4	88.3	7.4
MAULE M5	449	427	15	3.4	95.1	3.3
MAULE M6	68	65	3	4.1	96.2	3.9
MBB B0105	107	107	0	0.0	100.0	0.0
MCLISHFUNKB	141	79	16	20.5	55.9	11.4
MEYERSOTW	52	35	5	12.9	67.4	8.7
MNCOLUP90	68	32	8	25.6	47.7	12.2
MNMITEM18	149	52	19	36.9	34.8	12.9
MOOFD47	69	64	6	8.7	93.1	8.1
MOOFDUM12	21	6	4	62.5	30.0	18.8
MOONEYM20	6122	5699	133	2.3	93.1	2.2
MORTIS205	45	36	4	11.4	79.4	9.0
MTSBSIMU2	365	328	28	8.4	89.9	7.6
MTSBSIMU300	77	75	5	6.2	97.9	6.1
MULTECD16	46	34	4	12.8	73.7	9.4
NAWER B25	55	28	7	25.6	50.6	12.9
NAWER F51	137	64	25	38.5	47.1	18.1
NAWER NA260	60	33	7	21.2	55.2	11.7

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
NAMER T8	538	302	82	27.1	58.2	15.2
NATBAL752	20	20	0	0.0	100.0	0.0
NAVAL N3N	142	81	17	20.6	57.1	11.8
NAVIONNAVION	573	348	54	15.7	60.4	9.5
NORD SV4	45	9	8	82.8	20.8	17.3
NORWST85	58	40	7	17.5	68.8	12.0
OTHEXWILPIST	23	5	3	70.8	20.0	14.2
PARTENP88	46	45	3	7.1	97.0	6.9
PICARDAX6	153	92	8	7.0	59.9	4.2
PILATSB4	25	25	0	0.0	100.0	0.0
PIPER 800	403	403	0	0.0	100.0	0.0
PIPER E2	20	9	2	28.3	43.7	12.4
PIPER J2	56	10	4	38.1	17.5	6.7
PIPER J3	4148	1960	176	9.0	47.3	4.3
PIPER J4	243	110	28	25.3	45.5	11.5
PIPER J5	356	167	36	21.7	46.9	10.2
PIPER PA12	1344	850	54	6.3	63.3	4.0
PIPER PA14	105	66	11	16.4	62.6	10.3
PIPER PA15	186	125	20	16.3	67.2	11.0
PIPER PA16	360	279	28	10.1	77.4	7.8
PIPER PA17	113	48	12	25.1	42.7	10.7

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PIPER PA18	3532	3008	160	5.3	85.1	4.5
PIPER PA20	448	318	49	15.4	71.4	11.0
PIPER PA22	4893	3379	106	3.1	69.1	2.2
PIPER PA23	3517	2741	153	5.6	77.9	4.4
PIPER PA24	3215	2992	93	3.1	93.0	2.9
PIPER PA25	1355	1217	71	5.8	89.8	5.2
PIPER PA28	22711	21438	248	1.2	94.4	1.1
PIPER PA30	1283	1158	54	4.7	90.3	4.2
PIPER PA31	2131	2067	37	1.8	97.0	1.7
PIPER PA31T	616	616	0	0.0	100.0	0.0
PIPER PA32	4527	4271	113	2.6	94.3	2.5
PIPER PA34	2225	2132	83	3.9	95.8	3.7
PIPER PA36	407	396	11	2.7	97.3	2.6
PIPER PA38	1563	1499	36	2.4	95.9	2.3
PIPER PA42	88	88	0	0.0	100.0	0.0
PIPER PA44	352	327	8	2.5	92.8	2.3
PIPER PA46	84	83	2	2.7	98.7	2.6
PRATT PRG1	20	6	3	59.3	28.6	17.0
PROPT200	69	63	6	9.1	92.0	8.4
RAVEN RX6	206	112	22	19.5	54.5	10.6
RAVEN S50	87	53	13	25.0	60.4	15.1

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP 1984 PAGE 15 OF 18

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
RAVEN S55	782	679	16	2.3	86.9	2.0
RAVEN S80	157	152	6	4.0	96.9	3.9
RAVEN S88	36	35	2	5.7	95.8	5.4
RKWE1500	39	39	0	0.0	100.0	0.0
RKWE1700	24	21	3	15.2	85.7	13.0
RKWE1NA265	346	346	0	0.0	100.0	0.0
ROBSINR22	258	247	17	6.8	95.6	6.5
ROLSCHLS	114	104	7	6.6	91.0	6.0
RYAN ST3	161	113	21	18.4	70.4	12.9
RYAN STA	34	26	5	21.0	75.0	15.7
SCHLERASW15	36	36	0	0.0	100.0	0.0
SCHLERASW19	54	51	2	3.7	94.9	3.5
SCHLERASW20	96	91	4	4.1	94.8	3.9
SCHLERK8	22	21	1	4.9	94.1	4.6
SCHLERKA6	74	56	6	10.3	78.0	7.8
SCWZERG184	246	239	7	2.8	97.0	2.7
SCWZERSG1	762	537	46	8.6	70.5	6.1
SCWZERSG2	590	426	52	12.2	72.3	8.8
SEMOO CLINGER	27	7	4	85.7	25.0	16.4
SEMOO MODELT	29	5	5	94.6	16.7	15.8
SKRSKYSS5	30	13	5	37.2	44.0	16.4

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
SKRSKYS58	63	28	12	42.2	44.4	18.8
SKRSKYS76	138	138	0	0.0	100.0	0.0
SLINDS100	316	195	38	19.4	61.6	11.9
SMITH 600	373	352	8	2.3	94.4	2.1
SNIAS AS350	248	228	24	10.5	92.7	9.7
SNIAS AS355	148	148	0	0.0	100.0	0.0
SNIAS SA318	27	27	0	0.0	100.0	0.0
SNIAS SA341	45	25	8	32.3	55.2	17.8
SOCATAMS884	40	36	3	8.8	90.9	8.0
SOCATARALLYE	20	19	1	7.4	94.2	7.0
SPRTHCIRRUS	104	87	6	6.9	83.3	5.7
SPRTHNINBUS	52	40	5	11.5	77.7	9.0
SPRTHVENTUS	50	48	2	4.1	95.2	3.9
STBROSSD3	31	31	0	0.0	100.0	0.0
STNSON10	157	20	11	56.8	12.6	7.2
STNSONL5	131	64	18	28.2	48.8	13.7
STNSONSR9	26	9	2	25.0	33.3	8.3
STNSONV77	105	20	10	49.6	19.3	9.6
STOLAMRC3	224	93	30	32.4	41.4	13.4
SUPAC LA	99	16	6	37.3	15.8	5.9
SUPAC V	29	7	3	36.3	25.0	9.1

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
SWRNGNSA226	166	151	10	6.9	91.0	6.3
SWRNGNSA227	75	75	0	0.0	100.0	0.0
SWRNGNSA28	104	100	7	7.0	96.2	6.7
TCRAFK21	20	20	0	0.0	100.0	0.0
TCRAFKD	286	65	28	42.8	22.6	9.7
TCRAFTA	30	1	1	92.6	3.8	3.6
TCRAFTBC	1844	1085	112	10.3	58.8	6.1
TCRAFTBF	40	17	5	27.2	43.2	11.7
TCRAFTBL	231	44	22	51.1	19.0	9.7
TEMCO 11A	30	14	3	24.0	46.3	11.1
TH55	43	25	5	20.6	58.2	12.0
THUNDRA7	55	48	8	16.9	88.0	14.9
TMPSONNAVION	642	434	25	5.7	67.5	3.9
TOMCAT	37	31	4	13.3	83.3	11.0
TRYTEK65	349	101	38	37.6	28.8	10.8
TRYTEKK	33	5	2	40.9	16.0	6.5
UNIVACGC1	664	382	50	13.0	57.6	7.5
UNIVAR108	2009	1350	130	9.7	67.2	6.5
UNIVAR415	2409	1521	108	7.1	63.1	4.5
VARGA 2150	132	122	10	8.6	92.2	7.9
VICKER745	21	20	3	16.5	94.1	15.5

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT  
MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
WACO ASO	30	8	4	43.3	27.3	11.8
WACO GXE	38	6	3	42.9	17.9	7.7
WACO R	30	15	3	20.4	50.0	10.2
WACO U	20	4	2	42.9	17.8	7.8
WACO UPF7	184	70	14	19.3	42.7	8.2
WACO YK	55	9	4	45.0	15.9	7.2
WSK M18	40	39	2	4.2	97.3	4.1
WTHRLY201	88	59	4	7.5	87.1	8.5
TOTAL	287429	220943	1032	0.5	82.6	0.4

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY AIRCRAFT TYPE  
1984

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AIRCRAFT TYPE	IMC DAY			IMC NIGHT			IMC TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
<b>FIXED WING</b>									
<b>FIXED WING - PISTON</b>									
1 ENG: 1-3 SEATS	3502	417	68275	1177	250	11043	3505	417	79338
1 ENG: 4+ SEATS	45543	1116	1147317	26057	1008	319413	45932	1118	1468036
1 ENGINE: TOTAL	49045	1192	1215592	27234	1039	330456	49438	1193	1545372
2 ENG: 1-6 SEATS	13469	270	502728	10136	343	247546	13599	265	751111
2 ENG: 7+ SEATS	7302	222	481028	6118	274	259873	7399	212	740768
2 ENGINE: TOTAL	20771	350	983756	16254	439	507419	20998	338	1491880
PISTON: OTHER	162	38	10012	73	21	969	162	38	10981
PISTON: TOTAL	69979	1242	2209359	43561	1128	838843	70598	1241	3048232
<b>FIXED WING - TURBOPROP</b>									
2 ENG: 1-12 SEATS	4927	35	341647	4738	71	149797	4927	35	491427
2 ENG: 13+ SEATS	602	19	172228	593	27	86995	620	14	259120
2 ENGINE: TOTAL	5529	40	513874	5331	75	236792	5547	38	750547
TURBOPROP: OTHER	87	16	2259	45	20	1425	87	16	3682
TURBOPROP: TOTAL	5617	43	516132	5376	78	238216	5634	41	754329
TURBOPROP: TOTAL									
TURBOPROP: TOTAL									



TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY AIRCRAFT TYPE  
1984

PAGE 2 OF 6

AIRCRAFT TYPE	IMC DAY				IMC NIGHT				IMC TOTAL			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
FIXED WING - TURBOJET												
2 ENGINE TURBOJET	3771	10	311342	35994	3626	48	126857	14275	3771	10	438159	47743
TURBOJET: OTHER	396	36	99194	11218	386	37	44430	5189	396	36	143824	15913
TURBOJET: TOTAL	4167	38	410536	37702	4013	80	171287	15189	4167	38	581783	50325
FIXED WING: TOTAL	79762	1244	3136028	108469	52950	1132	1248346	82262	80399	1242	4384244	147006
ROTORCRAFT												
PISTON	52	39	636	403	49	38	403	345	52	39	1039	708
TURBINE	338	74	14215	4191	261	62	8472	2649	399	77	22604	6005
ROTORCRAFT: TOTAL	389	83	14851	4210	310	73	8876	2671	451	88	23643	6047
OTHER AIRCRAFT	37	23	915	566	0	0	0	0	37	23	915	566
TOTAL	80189	1247	3202824	108554	53259	1135	1277577	82319	80888	1245	4480401	147131

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY AIRCRAFT TYPE  
1984

PAGE 3 OF 6

AIRCRAFT TYPE	VMC DAY			VMC NIGHT			VMC TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
FIXED WING									
FIXED WING - PISTON									
1 ENG: 1-3 SEATS	6158	134	7818732	23717	718	553220	81881	45	8374334
1 ENG: 4+ SEATS	109276	183	11808583	76626	1057	1478352	109843	128	13092708
1 ENGINE: TOTAL	170834	227	19427296	100343	1278	2031572	171524	136	21467044
2 ENG: 1-6 SEATS	16328	68	1792159	13909	266	427992	18455	48	2222084
2 ENG: 7+ SEATS	8500	78	1440766	6757	271	408578	8551	64	1847826
2 ENGINE: TOTAL	24828	102	3232925	20666	379	834570	25006	79	4089890
PISTON: OTHER	261	7	45393	188	26	5658	261	7	51435
PISTON: TOTAL	19923	249	22705612	121197	1333	2871798	196791	157	25588374
FIXED WING - TURBOPROP									
2 ENG: 1-12 SEATS	4815	58	998399	4396	110	213439	4815	58	1211718
2 ENG: 13+ SEATS	616	15	362087	580	22	113309	618	14	475395
2 ENGINE: TOTAL	5431	60	1360486	4976	112	326748	5433	60	1687113
TURBOPROP: OTHER	171	6	42071	75	28	2288	171	6	44360
TURBOPROP: TOTAL	5802	60	1402557	5051	115	329036	5605	60	1731473
									78620
									52555
									94669
									13389
									95512

GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY AIRCRAFT TYPE  
1984

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AIRCRAFT TYPE	VMC DAY			VMC NIGHT			VMC TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
FIXED WING - TURBOJET									
2 ENGINE TURBOJET	3380	82	682972	3179	93	201232	3380	82	884100
45074									
TURBOJET: OTHER	449	22	65587	293	38	24548	449	22	90135
18685									
TURBOJET: TOTAL	3829	84	748559	3472	100	225780	3829	84	974225
48784									
FIXED WING: TOTAL	205354	270	24856720	129719	1342	3426615	205225	188	28294078
490814									
ROTORCRAFT									
PISTON	2904	37	514425	1445	146	71472	2933	8	587088
63288									
TURBINE	4000	79	1593373	2284	187	297003	4121	17	1886721
115890									
ROTORCRAFT: TOTAL	6904	87	2107789	3729	237	368475	7054	18	2483810
132044									
OTHER AIRCRAFT	6201	30	352270	163	53	2647	6268	6	354838
23101									
TOTAL	218459	285	27776735	133611	1364	3861880	219545	189	31638415
508790									

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY AIRCRAFT TYPE  
1984

AIRCRAFT TYPE	DAY TOTAL			NIGHT TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
<b>FIXED WING</b>						
<b>FIXED WING - PISTON</b>						
1 ENG: 1-3 SEATS	81888	128	7887408	23740	719	584279
1 ENG: 4+ SEATS	109849	114	12781822	77494	1048	1797838
1 ENGINE: TOTAL	171315	170	20649028	101234	1289	2382115
2 ENG: 1-6 SEATS	18488	42	2294748	14244	251	875258
2 ENG: 7+ SEATS	8878	38	1921798	7377	235	888409
2 ENGINE: TOTAL	25144	57	4216545	21621	344	1341687
PISTON: OTHER	282	0	57110	194	21	8625
PISTON: TOTAL	198720	179	24922682	123049	1315	3710409
<b>FIXED WING - TURBOPROP</b>						
2 ENG: 1-12 SEATS	4992	0	1338959	4878	48	383103
2 ENG: 13+ SEATS	638	4	534097	618	15	200228
2 ENGINE: TOTAL	5630	4	1874058	5494	50	583329
TURBOPROP: OTHER	178	0	44329	80	28	3713
TURBOPROP: TOTAL	5807	4	1918385	5574	58	587042

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY AIRCRAFT TYPE  
1984

PAGE 6 OF 6

AIRCRAFT TYPE	DAY TOTAL			NIGHT TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3780	0	993390	3680	32	327751
TURBOJET: OTHER	540	0	164782	389	37	68977
TURBOJET: TOTAL	4320	0	1158171	4070	49	396729
FIXED WING: TOTAL	206847	179	27999246	132692	1317	4674181
ROTORCRAFT						
PISTON	2907	36	515082	1445	146	71875
TURBINE	4076	65	1606180	2284	187	305451
ROTORCRAFT: TOTAL	6983	74	2121243	3729	237	377327
OTHER AIRCRAFT	6220	23	353184	163	53	2647
TOTAL	220051	195	30980587	138584	1339	5138229

156381

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY BASE REGION OF AIRCRAFT  
1984

PAGE 1 OF 3

REGION	IMC DAY				IMC NIGHT				IMC TOTAL			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ALASKAN	1118	210	78422	37881	484	108	18690	7920	1188	211	95111	41882
CENTRAL	5028	502	161592	27038	3218	397	74327	19154	5063	505	235344	39750
EASTERN	9470	837	463308	53502	6544	518	175713	25990	9528	638	638747	76449
EUROPEAN OFFICE	302	119	21801	19480	207	102	5117	2632	302	119	26919	22010
GREAT LAKES	14588	810	608134	58157	9751	654	241729	33203	14728	813	849725	81176
NEW ENGLAND	2890	371	140607	26748	1986	301	40734	9304	2957	376	181594	33114
NORTHWEST MT.	6751	565	212691	34781	3843	420	81958	23925	6785	566	294844	49900
SOUTHERN	13848	754	570708	55442	10209	640	291955	43187	13945	758	862552	91417
SOUTHWESTERN	13495	751	576375	61032	9292	811	220431	31222	13587	754	796806	84910
WESTERN-PACIFIC	12867	748	286341	39370	7855	584	110609	18462	12953	748	396835	57005
TOTAL	80189	1247	3202824	108554	53259	1135	1277577	62319	80888	1245	4480401	147131

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY BASE REGION OF AIRCRAFT  
1984

PAGE 2 OF 3

REGION	VMC DAY				VMC NIGHT				VMC TOTAL			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ALASKAN	7317	504	947856	102477	3186	345	77217	15182	7351	504	1025186	108920
CENTRAL	13109	783	1383200	119183	8439	657	193982	27086	13118	784	1579817	135009
EASTERN	23239	1004	2844788	188836	14385	815	517411	59880	23408	1006	3181916	224664
EUROPEAN OFFICE	482	155	96583	50400	235	117	5574	2816	482	155	102156	52015
GREAT LAKES	38067	1246	4095273	216683	23411	1029	613267	48537	38293	1249	4709496	250062
NEW ENGLAND	8120	614	1011475	109306	5126	504	134674	21623	8130	614	1146116	125424
NORTHWEST MT.	23962	1020	2858669	171607	12772	786	241430	32818	24130	1023	2900814	185953
SOUTHERN	32582	1167	4329448	248387	21053	969	731287	85542	32795	1171	5070081	292860
SOUTHWESTERN	34284	1182	5022113	319387	21637	971	851013	85506	34360	1183	5680437	347312
WESTERN-PACIFIC	37334	1221	5172685	388366	24237	1030	671755	69360	37541	1223	5845594	428121
TOTAL	218459	285	27776735	457026	133611	1364	3861680	124015	219545	189	31638415	508790

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13  
GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY BASE REGION OF AIRCRAFT  
1984

REGION	DAY TOTAL			NIGHT TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
ALASKAN	7384	508	1024302	118142	3249	20484
CENTRAL	13131	784	1544782	131851	8593	41889
EASTERN	23487	1008	3107778	218812	14772	75903
EUROPEAN OFFICE	491	155	118384	54510	291	4130
GREAT LAKES	38339	1249	4704121	242983	23887	74154
NEW ENGLAND	8170	615	1152370	121276	5230	27868
NORTHWEST MT.	24081	1022	2872170	184038	13027	45829
SOUTHERN	32704	1168	4903253	273615	21611	111872
SOUTHWESTERN	34739	1186	5800048	335792	22082	101227
WESTERN-PACIFIC	37470	1222	5480289	394998	24593	75553
TOTAL	220051	195	30980587	492869	136584	156381

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.



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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
OTHER 1	49	55	424	479	7811	0
OTHER 2	285	59	18111	6640	870	7
OTHER 3	22	13	481	594	91	0
OTHER 4	137	18	12467	4025	188	8
OTHER 5	51	19	6665	4825	91	0
OTHER 6	284	26	38032	9528	317	0
OTHER 7	154	8	83742	26300	157	0
OTHER 8	68	16	1113	899	82	0
OTHER 9	515	0	58528	19567	385	59
OTHER 10	100	35	13221	13910	196	15
OTHER 11	0	0	0	0	598	0
OTHER 12	41	25	2586	1945	170	0
OTHER 13	10	19	103	191	1391	0
ADAMS A50S	0	0	0	0	95	0
AERORSJ2	0	0	0	0	10	0
AEROSPSA318	0	0	0	0	138	0
AGUSTA A109	50	10	304	364	15	17
AIR&SPACE 18	0	0	0	0	3	0
AIRPTSA	0	0	0	0	82	0
AIRTRCAT300	0	0	0	0	354	0
AIRTRCAT400	0	0	0	0	50	0
AMD FALC10	137	8	18781	5062	138	7

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
AMD FALC20	205	0	12631	200	9	49746
AMD FALC50	100	0	18904	77	12	30844
AMTR TMK	0	0	0	2	0	149
ARCTICS1A	0	0	0	36	0	1944
ARCTICS1B1	0	0	0	15	0	318
ARONCA15	0	0	0	164	0	7578
ARONCA58	0	0	0	36	0	1692
ARONCA85	0	0	0	60	0	2280
ARONCAC3	0	0	0	17	0	238
AVIANNFALCON	0	0	0	21	0	285
AVIANNSKYHMK	0	0	0	39	0	1127
AYRES S2	5	3	384	722	0	265088
BAC 111	26	0	1614	20	4	3911
BAG B206	5	9	56	29	0	2708
BAG DH125	69	0	7139	68	2	23060
BALMKSFIREFY	0	0	0	1124	0	59143
BBAVIA11	0	0	0	264	0	28893
BBAVIA7	69	52	75	2416	0	138396
BBAVIA8	4	7	1237	228	7	21624
BEECH 100	275	0	31186	242	24	51450
BEECH 17	26	14	262	72	0	3918
BEECH 18	276	63	46068	398	29	90011
						53842

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BEECH 200	864	0	100881	25227	825	36	295839	54653
BEECH 23	837	122	18014	4048	2568	17	260777	29961
BEECH 300	13	3	522	187	21	0	1654	458
BEECH 33	1215	103	29617	6643	1676	0	174100	18091
BEECH 35	3134	284	66234	10815	6156	18	532343	36612
BEECH 36	1630	118	64873	14098	2072	0	281018	31174
BEECH 45	118	23	8813	4648	189	0	38259	8360
BEECH 50	121	45	2139	1141	242	0	21687	4823
BEECH 55	1813	98	88727	15805	2176	7	272986	20230
BEECH 56	41	4	1051	764	43	0	3967	1186
BEECH 58	1464	31	97268	21250	1486	0	254082	26370
BEECH 60	389	28	18254	5080	417	0	43162	9114
BEECH 65	58	25	7978	4839	126	0	26476	15399
BEECH 76	292	27	5501	1254	321	0	49481	11144
BEECH 77	47	29	701	839	237	9	60327	12675
BEECH 80	159	10	8219	6235	157	14	31446	27984
BEECH 90	1119	0	97891	17929	1119	0	230819	26796
BEECH 95	322	59	6607	3188	432	0	28912	9320
BEECH 99	90	0	28468	14846	81	9	73027	21395
BELL 47	24	35	69	99	889	0	208514	42692
BELL 204	0	0	0	0	20	0	5460	3147
BELL 205	0	0	0	0	8	0	1081	55

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BELL 206	65	57	4677	4188	2059	0	1058048	104748
BELL 212	3	14	78	364	122	0	50677	7829
BELL 222	31	10	1088	472	55	0	16321	4970
BELL 412	23	7	3291	1004	28	0	8645	0
BLANCA11	0	0	0	0	37	0	1419	154
BLANCA1413	0	0	0	0	121	0	2116	653
BLANCA1419	14	17	479	636	218	0	8959	2898
BLANCA17	539	95	15003	6878	1023	0	108008	12815
BLANCA7	0	0	0	0	1768	0	138632	19090
BLANCA8	8	9	161	183	435	8	39899	5927
BNORM BN2	37	7	2104	650	82	0	47812	5850
BOEING707	12	0	2948	358	0	0	0	0
BOEING720	16	8	0	0	8	8	0	0
BOEING727	63	0	11575	5248	61	6	25399	12899
BOEING737	15	0	3000	0	15	0	12000	0
BOEING747	0	0	0	0	30	0	2310	0
BOEING75	0	0	0	0	617	0	32818	4764
BOLKMS117	0	0	0	0	15	0	1863	0
BRANTLY 82	8	9	216	226	58	0	4345	1588
BRASOVIS28	0	0	0	0	45	0	3292	832
BRWSTRFLEET2	2	2	42	39	11	2	557	132
BRWSTRFLEET7	0	0	0	0	8	0	243	70

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BUKER 131	0	0	0	0	6	0	212	53
CAMPION/DELO	0	0	0	0	168	0	7849	1781
CESSNA120	1	6	3	13	457	0	16259	2028
CESSNA140	26	31	185	216	1656	0	65948	9267
CESSNA150	1903	349	49651	18397	17861	14	3581685	293970
CESSNA170	119	72	553	350	1965	0	131880	15164
CESSNA172	7858	605	284207	37884	23895	114	3400283	203107
CESSNA175	35	40	1731	2043	1198	0	85187	7286
CESSNA177	1339	138	25814	4926	2745	0	274325	20109
CESSNA180	551	73	10928	3837	2358	13	237881	18445
CESSNA182	5239	413	166382	23556	12838	44	1396241	88968
CESSNA185	403	48	9144	1938	1504	4	304704	25288
CESSNA188	0	0	0	0	1893	0	471889	43029
CESSNA190	1	3	97	197	67	0	3096	730
CESSNA195	103	41	1062	729	326	0	15289	2643
CESSNA205	60	22	1311	547	131	0	18945	3122
CESSNA208	1418	167	43624	12947	2912	11	528311	68375
CESSNA207	167	30	20352	11555	377	0	199786	36737
CESSNA210	4787	292	153150	27770	6199	0	719346	65909
CESSNA303	162	12	6981	2251	174	0	34188	7744
CESSNA305	0	0	0	0	203	0	42826	26188
CESSNA310	2284	103	146134	25038	2743	36	392860	40455

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
CESSNA320	223	12	4873	302	0	29753
CESSNA335	50	3	3088	52	0	9422
CESSNA336	59	18	144	84	0	5725
CESSNA337	902	92	28021	1102	0	138841
CESSNA340	884	0	84930	884	0	128154
CESSNA401	196	31	7910	228	12	22738
CESSNA402	681	30	149891	694	17	280715
CESSNA404	29	39	12379	158	20	24732
CESSNA411	135	18	3174	141	0	14123
CESSNA414	804	0	41548	804	0	185049
CESSNA421	1173	0	68937	1173	0	172070
CESSNA425	161	0	14800	161	0	32190
CESSNA441	248	0	31583	188	25	42992
CESSNA500	547	0	47130	542	13	144589
CESSNA501	53	0	2419	53	0	8985
CESSNA650	49	0	5378	40	5	10209
CESSNA750	0	0	0	14	0	103
CESSNAUC94	0	0	0	12	0	748
CHILD S1	0	0	0	51	0	8238
CHILD S2	12	9	118	182	0	18659
CHDAIRCL800	87	0	7981	87	0	32814
COMWTH185	0	0	0	44	0	1927
						2325
						1705
						2355
						22438
						21390
						5040
						88779
						21790
						4848
						25681
						35131
						8448
						10134
						18024
						2065
						2272
						18
						181
						1572
						2678
						8040
						489

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
CONAERLA4	19	24	125	169	430	0	35467	6221
CURTISC46	14	0	344	193	14	0	3094	1739
CURTISJR	0	0	0	0	6	0	90	9
CURTISROBIN	0	0	0	0	6	0	0	0
CURTISTRVAIR	0	0	0	0	18	0	985	253
CVAC 240	2	0	89	0	2	0	38	0
CVAC 440	0	0	0	0	16	0	321	0
CVAC BT13	0	0	0	0	53	0	1240	468
CVAC L13	2	0	2	0	0	0	0	0
CVAC STC580	36	0	5116	2811	36	0	18963	4488
DART G	0	0	0	0	11	0	327	12
DHAV DHC1	0	0	0	0	69	0	4628	683
DHAV DHC2	0	0	0	0	197	0	22831	6338
DHAV DHC3	0	0	0	0	14	0	3058	686
DHAV DHC6	66	6	23881	6335	72	0	64714	11671
DHAVXXDH82	0	0	0	0	62	0	3032	593
DOUG A26	4	3	17	14	21	0	841	160
DOUG DC10	28	0	93268	0	0	0	0	0
DOUG DC3	75	71	4082	5178	276	11	57401	18887
DOUG DC4	37	25	193	130	70	0	6288	4177
DOUG DC6	71	21	3948	1723	82	7	32123	11611
DOUG DC7	3	3	174	166	18	0	1429	188

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
DOUG DC9	31	0	68886	34038	12	10	3832	4142
EAGLE DW	0	0	0	0	79	0	18864	4049
EAGLEBC7	0	0	0	0	38	0	2172	278
EIRVON20	0	0	0	0	109	0	8374	1807
EMAIR MA1	0	0	0	0	11	0	1200	0
EMB 110	47	9	50392	14008	47	9	55196	17840
ENSTRM280	0	0	0	0	115	0	38585	15693
ENSTRMF28	19	15	754	684	261	8	41386	13326
FLEET 168	0	0	0	0	9	0	265	45
FRCHLD24	0	0	0	0	84	0	2048	724
FRCHLDC119	0	0	0	0	31	0	367	0
FRCHLDF27	30	0	2668	288	30	0	12474	2932
FRCHLDFH1100	0	0	0	0	19	0	1687	400
FRCHLDWB2	0	0	0	0	139	0	12217	4420
GENBALAX6	0	0	0	0	54	0	2197	405
GLASFL201	0	0	0	0	33	0	1412	303
GLASFLH301	0	0	0	0	103	0	9447	4121
GR08 103CAT	0	0	0	0	54	0	8749	1271
GR08 109	3	2	3	2	51	0	4341	473
GR08 ASTIR	0	0	0	0	54	0	5715	1105
GRTLKS2T1	0	0	0	0	94	0	4457	2118
GRUBAVAA1	96	61	529	492	540	23	48817	15680



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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
GRUMAVAA5	494	109	8902	4740	1027	0	123791	27754
GRUMAVG1159	41	0	4792	2512	39	3	14730	2424
GRUMAVG184	0	0	0	0	1089	0	360607	29414
GRUMAVG21	5	4	176	143	29	0	6341	2130
GRUMAVT8M	0	0	0	0	15	0	232	75
GULSTN112	357	63	10047	3509	570	0	52230	6971
GULSTN500	236	10	18741	3203	264	4	72917	14884
GULSTN520	15	6	116	45	29	0	1400	621
GULSTN560	31	6	1228	810	37	0	5082	1790
GULSTN680	179	29	7799	2397	212	11	28518	12934
GULSTN680TP	87	0	6171	3027	87	0	14299	3787
GULSTN690TC	30	0	5421	1524	30	0	5734	1004
GULSTN690TP	482	20	50408	13238	473	25	121194	25474
GULSTNAA1	62	26	423	247	543	0	40835	10574
GULSTNAA5	202	72	3748	1675	807	0	61261	10873
GULSTNG1159	169	0	29662	9124	103	24	26529	7479
GULSTNG159	125	0	12957	2775	125	0	78058	20557
GULSTNG44	11	18	343	558	87	7	5863	1111
GULSTNG73	6	4	204	161	25	0	5553	2893
GULSTNGA7	44	7	1425	400	53	0	5621	1269
H-1	1	6	2	9	89	0	9932	5420
H13/HTL	0	0	0	0	27	0	5528	2382

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
H19/45	0	0	0	0	13	0	3433	831
H23/HTE	0	0	0	0	15	0	4848	3725
H34/55	0	0	0	0	5	0	1217	120
HELIO H285	23	8	582	321	50	0	7478	1498
HELIO H391	1	2	0	0	10	0	362	142
HELIO H395	0	0	0	0	11	0	1523	312
HILLERUM12	0	0	0	0	170	0	30138	14211
HUGHES289	0	0	0	0	489	0	128266	27823
HUGHES389	80	28	1658	553	804	0	268729	30048
HMKSLYDH104	0	0	0	0	3	0	305	0
HMKSLYDH125	193	0	19878	5114	174	18	49212	8881
INTRCP200	4	4	10	11	28	0	1353	354
ISRAEL1121	93	0	4498	2145	89	7	17954	5204
ISRAEL1123	23	0	1226	366	23	0	1325	625
ISRAEL1124	191	0	14401	6333	173	16	31348	8551
JBMSTROGA15	0	0	0	0	9	0	172	45
LAIKFN10	0	0	0	0	5	0	84	17
LEAR 23	54	0	6142	1898	36	11	6001	2019
LEAR 24	122	6	7672	2746	122	6	30299	7918
LEAR 25	261	0	26529	7904	252	13	55148	8841
LEAR 35	409	0	43251	14298	394	23	115503	17183
LEAR 55	80	0	17482	5243	66	8	15504	4261

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
LET L13	0	0	0	0	180	0	14005	3048
LOCKHEED12A	0	0	0	0	9	0	183	77
LOCKHEED1329	77	0	3707	1151	77	0	9838	4081
LOCKHEED18	41	11	352	197	47	0	2092	560
LUSCOMB	54	25	3777	2194	1222	23	70815	7368
MAULE M4	0	0	0	0	243	0	12822	3084
MAULE M5	78	28	1148	601	427	0	34080	3834
MAULE M8	18	7	119	63	65	0	9047	1254
MBB B0105	3	9	108	339	107	0	30433	8101
MCCLISHFUNKB	0	0	0	0	79	0	2097	428
MEYERSOVY	0	0	0	0	35	0	1045	217
MICOLUP90	0	0	0	0	32	0	2264	601
MILWITEN18	0	0	0	0	52	0	1322	407
MOFFD47	0	0	0	0	64	0	20540	11153
MOFFDUH12	0	0	0	0	6	0	1817	495
MOONEYM20	2958	288	82430	12857	5899	0	614451	55951
MORCHTIS205	13	5	85	37	36	0	2296	342
NTSBSIMJ2	328	0	18642	7088	328	0	51674	15457
NTSBSIMJ300	75	0	5305	2265	31	20	8314	5442
MULTTECD18	9	5	40	23	34	0	2413	523
NAMER B25	4	4	19	20	28	0	1382	265
NAMER F51	5	7	76	105	64	0	2966	727

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
NAMER NA260	21	5	1037	499	28	4	1935	459
NAMER T6	15	25	530	857	302	0	17881	3948
NATBAL752	0	0	0	0	20	0	639	99
NAVAL N3N	0	0	0	0	81	0	3628	581
NAVIONNAVION	65	37	1091	878	331	20	15166	2494
NORD SV4	0	0	0	0	9	0	938	0
NORWST65	0	0	0	0	40	0	2100	636
OTHEXMIPIPIST	0	0	0	0	5	0	239	0
PARTENP68	42	3	2331	558	45	0	15553	2070
PICARDAX6	2	2	98	93	90	2	2085	305
PILATS84	0	0	0	0	25	0	2248	418
PIPER 600	398	12	55215	17915	385	22	61238	12453
PIPER E2	0	0	0	0	9	0	205	128
PIPER J2	0	0	0	0	10	0	250	59
PIPER J3	1	7	0	0	1959	7	98061	9750
PIPER J4	0	0	0	0	110	0	3319	725
PIPER J5	0	0	0	0	167	0	45338	32753
PIPER PA12	2	5	127	292	848	5	84953	13851
PIPER PA14	10	10	949	995	58	9	5134	1195
PIPER PA15	0	0	0	0	125	0	4844	669
PIPER PA16	10	12	154	178	279	0	14630	3614
PIPER PA17	0	0	0	0	48	0	2390	462

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
PIPER PA18	34	52	711	1243	3008	0	397143	87881
PIPER PA20	0	0	0	0	318	0	17015	4558
PIPER PA22	117	44	1673	780	3372	10	207246	13818
PIPER PA23	1874	159	98164	17385	2741	0	335162	43424
PIPER PA24	1217	184	24258	5329	2992	0	272389	21989
PIPER PA25	0	0	0	0	1217	0	227424	27998
PIPER PA28	8234	521	244673	29441	21438	0	2588400	131500
PIPER PA30	920	72	23762	4449	1158	0	114455	11452
PIPER PA31	1993	47	251578	38193	1960	46	512749	56302
PIPER PA31T	616	0	48284	9838	616	0	147746	25122
PIPER PA32	2952	244	156744	36046	4271	0	805068	61978
PIPER PA34	1743	171	159943	48267	2132	0	404982	52402
PIPER PA36	0	0	0	0	396	0	99743	14994
PIPER PA38	59	38	312	320	1499	0	513741	76733
PIPER PA42	88	0	8556	2313	78	7	20030	3150
PIPER PA44	302	10	13787	3453	325	3	58691	8483
PIPER PA46	83	0	2335	565	83	0	8976	1777
PRATT PRG1	0	0	0	0	6	0	127	28
PROPIJT200	29	11	593	291	63	0	4375	1844
RAVEN RX6	0	0	0	0	112	0	4113	758
RAVEN S50	0	0	0	0	53	0	892	308
RAVEN S55	8	6	302	241	674	5	30910	2920

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
RAVEN S80	0	0	0	0	152	0	7404	1818
RAVEN S86	0	0	0	0	35	0	1954	287
RKWEELL500	39	0	3863	2052	39	0	8781	1429
RKWEELL700	21	0	8977	5585	21	0	15495	7499
RKWEELLNA265	348	0	25833	5489	338	14	88811	11577
ROBSINR22	0	0	0	0	247	0	88908	28158
ROLSCHLS	0	0	0	0	104	0	10001	943
RYAN ST3	0	0	0	0	113	0	5110	1341
RYAN STA	0	0	0	0	25	0	818	272
SCHLERASW15	0	0	0	0	38	0	2289	308
SCHLERASW19	0	0	0	0	51	0	3984	838
SCHLERASW20	0	0	0	0	91	0	8573	814
SCHLERK8	0	0	0	0	21	0	1201	277
SCHLERKA8	0	0	0	0	58	0	2172	244
SCHWZERG184	2	4	2	4	239	0	55942	8128
SCHWZERSG1	8	11	331	459	537	0	24498	4389
SCHWZERSG2	0	0	0	0	428	0	59777	18328
SEWCO CLINGER	0	0	0	0	7	0	179	108
SEWCO MODEL T	0	0	0	0	5	0	58	0
SKRSKYS55	0	0	0	0	13	0	1409	307
SKRSKYS58	0	0	0	0	28	0	2830	1418
SKRSKYS78	88	22	8407	3502	138	0	50348	17401

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
SLINDS100	58	24	683	365	195	0	13025	3178
SMITH 600	334	8	18844	2700	349	3	51094	4987
SNIAS AS350	5	15	236	690	228	0	83393	13631
SNIAS AS355	5	12	123	278	148	0	101109	10681
SNIAS SA318	0	0	0	0	27	0	2511	0
SNIAS SA341	3	4	47	53	25	0	2309	763
SOCATAMS884	5	5	28	27	36	0	1872	368
SOCATARALLYE	3	2	24	18	19	0	1317	190
SPRTHCIRRUS	5	4	25	21	87	0	5287	980
SPRTHNIMBUS	2	3	54	75	39	3	2699	438
SPRTHVENTUS	0	0	0	0	48	0	3991	530
STBROSSD3	31	0	23295	6060	31	0	47107	3887
STNSON10	0	0	0	0	20	0	1082	165
STNSONL5	0	0	0	0	64	0	4260	1298
STNSONSR9	0	0	0	0	9	0	241	119
STNSONV77	0	0	0	0	20	0	403	134
STOLAMRC3	0	0	0	0	93	0	3319	1033
SUPAC LA	0	0	0	0	16	0	300	92
SUPAC V	0	0	0	0	7	0	116	61
SWRNGNSA226	151	0	43335	10101	136	11	55572	13982
SWRNGNSA227	71	8	10989	4478	62	10	12098	3997
SWRNGNSA26	92	11	5538	1410	100	0	25502	6035

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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	STD ERROR
TCRAFK21	0	0	0	20	0	1114
TCRAFKD	0	0	0	65	0	521
TCRAFTA	0	0	0	1	0	0
TCRAFTBC	0	0	0	1085	0	4451
TCRAFTBF	0	0	0	17	0	193
TCRAFTBL	0	0	0	44	0	614
TENCO 11A	0	0	0	14	0	79
TH65	0	0	0	25	0	787
THUNDERAX7	0	0	0	48	0	236
TMPSONNAVION	109	22	4144	434	0	2682
TOMCAT	0	0	0	31	0	1020
TRYTEK65	0	0	0	101	0	989
TRYTEKK	0	0	0	5	0	0
UNIVACGC1	11	9	137	382	0	2680
UNIVAR108	10	23	149	1350	0	10148
UNIVAR415	20	23	194	1502	22	5324
VARGA 2150	2	6	3	122	0	1859
VICKER745	20	0	2569	15	6	839
WACO ASO	0	0	0	8	0	102
WACO GXE	0	0	0	6	0	137
WACO R	0	0	0	15	0	36
WACO U	0	0	0	4	0	8



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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
WACO UPF7	0	0	0	0	70	0	1942	502
WACO YK	0	0	0	0	9	0	408	220
WSK M18	0	0	0	0	39	0	7786	1882
WTHRRLY201	0	0	0	0	59	0	11905	1114
TOTALS	8088	1245	4480401	147131	218545	189	31838415	508790

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
OTHER 1	7543	85	427097	66301	487	189	3139	1585
OTHER 2	868	12	123386	27201	405	63	9392	2454
OTHER 3	91	0	6314	2029	32	15	654	464
OTHER 4	171	0	27842	10389	130	19	10674	4317
OTHER 5	91	0	17977	10880	32	18	1602	1333
OTHER 6	317	0	107272	18600	281	27	27490	9878
OTHER 7	157	0	136584	47896	154	8	56455	18208
OTHER 8	82	0	12291	12268	28	20	1292	999
OTHER 9	515	0	124559	22936	515	0	34211	9108
OTHER 10	206	0	28365	15027	101	35	6600	4482
OTHER 11	569	36	30386	8668	107	65	2465	1678
OTHER 12	170	0	46404	10628	61	28	20566	11992
OTHER 13	1391	0	45132	9261	63	48	1700	1692
ADAMS A50S	95	0	5596	2856	0	0	0	0
AERORSJ2	10	0	143	13	0	0	0	0
AEROSPSA318	138	0	95823	15080	10	24	2508	5853
AGJSTA A108	54	0	2795	3779	15	17	492	590
AIRSPACE 18	3	0	110	0	0	0	0	0
AIRPTSA	82	0	8707	3350	0	0	0	0
AIRTRCAT300	354	0	117870	12000	85	43	2720	1484
AIRTRCAT400	50	0	19035	2114	6	4	1051	821
AND FALC10	143	0	42360	4579	130	11	8895	1799

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
AMD FALC20	205	0	48450	7671	205	0	15900	6499
AMD FALC50	100	0	36152	5266	92	8	13596	2677
AMTR TMK	2	0	149	50	0	0	0	0
ARCTICS1A	36	0	1944	879	0	0	0	0
ARCTICS1B1	15	0	318	61	0	0	0	0
ARONCA15	164	0	7553	1579	4	16	25	112
ARONCA58	36	0	1892	408	0	0	0	0
ARONCA85	0	0	2280	824	0	0	0	0
ARONCAC3	17	0	238	84	0	0	0	0
AVIANW/FALCON	21	0	295	72	0	0	0	0
AVIANWSKYHMK	39	0	1127	333	0	0	0	0
AYRES S2	717	3	263043	39991	139	85	2424	1014
BAC 111	28	0	4478	1157	19	4	1047	471
BAG B206	29	0	2234	313	28	5	531	117
BAG DH125	69	0	21720	2384	69	0	8437	1116
BALWKS/FIREFY	1124	0	59143	10034	0	0	0	0
BBAVIA11	284	0	28893	8872	0	0	0	0
BBAVIA7	2375	41	136518	15987	247	95	1961	1003
BBAVIA8	233	0	22033	6731	30	17	828	546
BEECH 100	275	0	60457	14162	275	0	22179	6631
BEECH 17	72	0	3999	1358	48	13	181	105
BEECH 18	417	0	86822	50877	308	59	49266	24654

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BEECH 200	884	0	319728	45885	884	0	76887	17723
BEECH 23	2575	11	243548	27370	2045	108	35213	6100
BEECH 300	21	0	1788	493	13	3	388	118
BEECH 33	1676	0	171738	15810	1337	92	31979	6384
BEECH 35	8089	62	519120	34870	4546	250	79424	11758
BEECH 38	2071	7	292438	29130	1635	117	53848	15520
BEECH 45	189	0	38050	8364	133	22	9022	4453
BEECH 50	242	0	16977	3754	209	31	6855	3044
BEECH 55	2178	0	277736	19167	2005	71	83975	20435
BEECH 58	43	0	4591	1188	25	9	427	223
BEECH 58	1486	0	275452	27824	1404	59	75898	16158
BEECH 60	417	0	48572	9490	347	43	12844	3986
BEECH 65	126	0	28111	15186	48	25	6343	4780
BEECH 76	321	0	50647	11167	255	39	4335	1176
BEECH 77	241	0	51724	10805	217	21	9835	2743
BEECH 80	161	0	28991	28049	161	0	10674	4756
BEECH 90	1119	0	245749	28165	1119	0	83081	14812
BEECH 95	432	0	30455	9537	331	57	5063	2567
BEECH 99	90	0	66615	17436	90	0	34687	7139
BELL 47	889	0	173005	34347	484	106	34711	21183
BELL 204	20	0	5410	3113	10	7	50	34
BELL 206	6	0	1027	52	6	0	54	3

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BELL 206	1974	65	932374	113070	1103	163	121192	43830
BELL 212	122	0	46382	6682	110	27	4373	1893
BELL 222	55	0	13433	3831	39	9	3976	1793
BELL 412	26	0	9880	0	23	7	2194	669
BLANCA11	37	0	1419	154	0	0	0	0
BLANCA1413	87	27	1723	790	43	28	393	268
BLANCA1419	218	0	8640	2601	129	33	799	479
BLANCA17	1023	0	104882	11925	928	55	18047	3371
BLANCA7	1768	0	132878	17955	634	133	5846	1888
BLANCA8	440	4	38173	5856	180	32	1886	559
BNORM BN2	82	0	42540	8170	68	5	7381	1901
BOEING707	12	0	1875	89	12	0	1273	270
BOEING720	24	0	0	0	18	8	0	0
BOEING727	63	0	20376	7944	63	0	18598	9973
BOEING737	15	0	12000	0	15	0	3000	0
BOEING747	30	0	2310	0	0	0	0	0
BOEING75	817	0	32511	4880	120	62	307	282
BOLKWS117	15	0	1770	0	15	0	93	0
BRANTLY B2	58	0	4402	1710	30	12	158	78
BRASOVIS28	45	0	3292	832	0	0	0	0
BRWSTFLEET2	11	2	557	132	2	2	42	39
BRWSTFLEET7	8	0	243	70	0	0	0	0

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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
BUKER 131	6	0	212	53	0	0
CAMRONMODELO	188	0	7849	1781	0	0
CESSNA120	457	0	15989	1900	69	217
CESSNA140	1656	0	62830	8782	573	1071
CESSNA150	17781	86	3287188	282039	11980	48206
CESSNA170	1985	0	121009	13182	1102	3136
CESSNA172	23793	79	3190033	192485	17350	53818
CESSNA175	1198	0	62037	7176	799	1277
CESSNA177	2745	0	285115	18843	1813	5418
CESSNA180	2360	13	227281	17893	1270	4882
CESSNA182	12873	0	1399677	86889	9178	16505
CESSNA185	1500	7	288635	24028	802	7619
CESSNA188	1693	0	462738	42935	207	7606
CESSNA190	67	0	3041	743	18	92
CESSNA195	326	0	14631	2340	159	766
CESSNA205	131	0	16651	3000	78	722
CESSNA208	2910	14	530615	68835	1648	8389
CESSNA207	377	0	199007	35113	278	6518
CESSNA210	6199	0	753377	65740	5141	24305
CESSNA303	174	0	33304	6888	149	2425
CESSNA305	203	0	42385	26207	40	208
CESSNA310	2781	29	389210	38254	2520	32157

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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
CESSNA320	302	0	30481	246	11	4145
CESSNA335	52	0	9995	52	0	2495
CESSNA338	84	0	4431	78	12	1438
CESSNA337	1102	0	142338	872	97	20323
CESSNA340	884	0	152860	845	41	38224
CESSNA401	234	0	24745	136	42	5879
CESSNA402	899	0	261342	557	78	189211
CESSNA404	163	0	32026	111	48	5084
CESSNA411	141	0	14132	135	18	3185
CESSNA414	772	38	144907	804	0	61691
CESSNA421	1173	0	180342	1149	35	60884
CESSNA425	181	0	37444	158	7	9548
CESSNA441	248	0	56780	242	10	17795
CESSNA500	547	0	157674	546	6	33954
CESSNA501	53	0	9526	53	0	1858
CESSNA850	49	0	12144	49	0	3443
CESSNA750	14	0	92	6	4	11
CESSNAUC94	12	0	661	4	3	85
CHILD S1	51	0	6238	0	0	0
CHILD S2	182	0	16624	12	9	151
CNDATRC1800	87	0	31128	87	0	9488
COMWTH185	44	0	1926	2	4	1
						2

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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
CONAERLA4	430	0	31500	276	57	4082
CLRTISC46	14	0	3058	7	5	381
CLRTISUR	8	0	90	0	0	0
CLRTISROBIN	8	0	0	0	0	0
CLRTISTRVAIR	18	0	985	0	0	0
CVAC 240	2	0	102	2	0	25
CVAC 440	18	0	321	0	0	0
CVAC BT13	53	0	1238	3	8	2
CVAC L13	2	0	2	0	0	0
CVAC STC580	39	0	19430	24	5	3349
DART G	11	0	327	0	0	0
DHAV DHC1	89	0	4511	15	6	117
DHAV DHC2	197	0	21270	84	36	1561
DHAV DHC3	14	0	2884	3	2	84
DHAV DHC8	89	4	71108	66	6	17287
DHAVXDH82	61	4	3025	2	4	12
DOUG A26	21	0	838	6	4	18
DOUG DC10	28	0	65288	28	0	27880
DOUG DC3	278	0	53368	198	72	7570
DOUG DC4	70	0	6027	70	0	485
DOUG DC8	83	0	31825	81	8	4546
DOUG DC7	18	0	1881	10	4	22
						17



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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
DOUG DC9	31	0	50797	26	8	21722
EAGLE DW	79	0	16789	8	8	95
EAGLEBC7	38	0	2172	0	0	0
EIRVON20	100	11	8127	8	11	247
EMAIR MA1	11	0	1200	0	0	0
EMB 110	51	0	59957	47	9	45631
ENSTRM280	115	0	35165	80	20	4499
ENSTRMF28	285	0	33357	111	29	8559
FLEET 168	9	0	265	0	0	0
FRCHLD24	84	0	2048	0	0	0
FRCHLDC119	31	0	367	0	0	0
FRCHLDF27	30	0	13773	30	0	1368
FRCHLDFH1100	19	0	1594	9	5	73
FRCHLDM62	139	0	12217	0	0	0
GENBALAX6	54	0	2197	0	0	0
GLASFL201	33	0	1412	0	0	0
GLASFLH301	103	0	9447	0	0	0
GROB 103CAT	54	0	8749	0	0	0
GROB 109	51	0	4262	16	4	82
GROB ASTIR	54	0	5715	0	0	0
GRTLKS2T1	94	0	4454	3	5	3
GRUMAVAA1	526	33	45582	332	78	3746
			15028			1307

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
GRUMAVAA5	1027	0	118948	22893	798	91	15702	5975
GRUMAVG1159	41	0	13836	2095	41	0	5492	1747
GRUMAVG184	1085	10	356382	29426	60	37	4204	3085
GRUMAVG21	29	0	5986	2135	12	5	531	287
GRUMAVTBM	15	0	226	71	4	4	6	6
GULSTM112	570	0	53673	8046	432	55	8595	2291
GULSTM500	267	0	60923	12645	224	12	30735	7585
GULSTM520	29	0	1353	670	14	6	184	95
GULSTM580	37	0	5535	1689	34	5	775	413
GULSTM680	216	0	33159	12432	171	31	3130	1581
GULSTM680TP	87	0	13886	4280	85	8	6584	2046
GULSTM690TC	30	0	9032	1244	30	0	2123	314
GULSTM690TP	499	0	144747	31590	477	23	26855	6278
GULSTMAA1	540	7	37259	9324	285	41	3988	1214
GULSTMAA5	607	0	57273	9626	538	49	7638	2301
GULSTMG1159	169	0	43336	6374	169	0	12079	2454
GULSTMG159	125	0	76665	17785	125	0	14351	5000
GULSTMG44	69	0	5688	1022	59	17	518	249
GULSTMG73	25	0	5645	2905	6	4	112	84
GULSTMGA7	53	0	5656	1433	40	8	1390	479
H-1	89	0	8638	5337	54	23	1276	1848
H113/HTL	27	0	5088	2139	16	7	440	279

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SOR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
H19/45	13	0	3433	831	0	0	0	0
H23/HTE	15	0	4788	3728	7	4	48	28
H34/55	5	0	1115	111	5	0	103	19
HELIO H295	50	0	7204	1538	20	8	858	444
HELIO H391	10	0	362	142	1	2	0	0
HELIO H395	11	0	1477	278	2	2	48	48
HILLERH12	170	0	28788	13830	72	34	1338	740
HUGHES289	489	0	114086	24808	351	52	14072	8404
HUGHES369	604	0	163392	19398	431	34	108944	27891
HMKSLYDH104	3	0	302	0	3	0	3	0
HMKSLYDH125	193	0	51448	6228	183	0	17845	3208
INTRCP200	28	0	1277	326	12	6	87	41
ISRAEL1121	93	0	14872	3786	83	0	7580	1799
ISRAEL1123	23	0	1945	87	23	0	808	379
ISRAEL1124	191	0	34825	7785	138	25	10824	2629
JBMSTRDGA15	9	0	172	45	0	0	0	0
LAIFN10	5	0	84	17	0	0	0	0
LEAR 23	54	0	8577	914	38	11	3588	1588
LEAR 24	25	0	18850	2368	125	0	19122	8952
LEAR 25	1	0	57623	8836	259	7	24054	4978
LEAR 35	..	0	108485	14788	408	0	52259	13706
LEAR 55		0	25820	4146	80	0	7096	1910

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
LET L13	180	0	14005	3048	0	0	0	0
LKHEED12A	9	0	177	77	3	2	8	5
LKHEED1329	77	0	10818	4080	77	0	2930	1185
LKHEED18	47	0	1955	329	38	13	489	398
LUSCOM8	1283	8	71728	7242	182	44	2847	1207
MAULE M4	243	0	11472	2458	79	30	1150	883
MAULE M5	427	0	33131	3868	227	38	2097	551
MAULE M8	65	0	8785	1250	37	8	402	128
MBB BO105	107	0	29403	8030	66	27	1138	1198
MCCLISHFUNKB	79	0	2087	425	4	6	10	18
MEYERSOTW	35	0	1045	217	0	0	0	0
MNCOUP90	32	0	2227	608	8	5	37	29
MNITEM18	52	0	1320	407	2	5	2	8
MODFD47	64	0	19488	11357	18	11	1051	872
MODFDH12	8	0	1617	495	0	0	0	0
MOONEYM20	5899	0	629274	57858	4171	238	68787	9233
MRCHTIS205	38	0	2341	325	7	4	39	31
MTSBSIMJ2	328	0	49187	14504	328	0	21129	10810
MTSBSIMJ300	75	0	10907	4805	75	0	2712	1442
MULTECD16	34	0	2405	521	9	5	48	35
NAMER B25	28	0	1252	225	16	6	150	59
NAMER F51	64	0	2994	750	5	7	48	68

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
NAMER NA260	33	0	2717	492	17	5	255	141
NAMER T8	302	0	17401	3883	48	41	992	948
NATBAL752	20	0	639	99	0	0	0	0
NAVAL N3N	81	0	3622	580	2	5	6	14
NAVIONNAVION	332	19	13281	2118	118	45	2896	1846
NORD SV4	9	0	938	0	0	0	0	0
NORWST85	40	0	2100	636	0	0	0	0
OTHEXMILPIST	5	0	227	0	5	0	12	0
PARTENP88	45	0	15551	2188	45	0	2333	610
PICARDAX8	92	0	2160	306	2	2	4	4
PILATSB4	25	0	2248	419	0	0	0	0
PIPER 600	387	30	63922	11721	352	35	52532	26791
PIPER E2	9	0	205	128	0	0	0	0
PIPER J2	10	0	250	59	0	0	0	0
PIPER J3	1959	7	98076	9758	3	10	59	195
PIPER J4	110	0	3319	725	0	0	0	0
PIPER J5	167	0	45338	32753	0	0	0	0
PIPER PA12	844	8	83577	13685	195	41	1503	747
PIPER PA14	66	0	5950	904	38	14	134	78
PIPER PA15	125	0	4793	667	7	8	51	56
PIPER PA16	279	0	13750	3285	99	30	964	404
PIPER PA17	48	0	2343	480	6	5	16	14

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
PIPER PA18	3006	0	385808	86965	580	190	12044	11995
PIPER PA20	318	0	18828	4345	18	24	187	249
PIPER PA22	3373	10	195458	12919	1282	113	13498	2489
PIPER PA23	2741	0	341886	37624	2098	145	89468	21969
PIPER PA24	2968	33	255043	21093	2052	174	41602	7041
PIPER PA25	1217	0	224409	27935	233	108	3015	1459
PIPER PA28	21438	0	2459033	126759	18065	478	370599	29518
PIPER PA30	1158	0	113523	10689	1061	49	24693	4319
PIPER PA31	2067	0	582497	58502	1919	65	178625	28892
PIPER PA31T	616	0	163836	28807	803	24	32397	8440
PIPER PA32	4271	0	819424	59758	3593	193	142388	34416
PIPER PA34	2132	0	450887	60896	1694	179	114038	35452
PIPER PA36	394	6	98162	14162	41	27	1576	1185
PIPER PA38	1499	0	453145	71826	1238	74	61207	11037
PIPER PA42	88	0	22244	2529	88	0	6342	1185
PIPER PA44	327	0	59032	7540	293	11	13428	2706
PIPER PA46	83	0	10066	1746	72	8	1246	422
PRATT PRG1	6	0	127	28	0	0	0	0
PROPTJ200	63	0	4691	2079	22	11	278	165
RAVEN RX6	111	3	4108	763	1	3	9	20
RAVEN S50	51	4	871	319	2	4	21	44
RAVEN S55	674	5	31088	2916	15	8	128	81

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
RAVEN S80	117	18	7201	38	19	204
RAVEN S88	35	0	1944	2	2	10
RKWEEL500	39	0	9785	34	4	859
RKWEEL700	21	0	17859	21	0	4813
RKWEELNA285	348	0	91823	348	0	22810
ROBSINR22	247	0	80392	218	27	8518
ROLSCHLS	104	0	10001	0	0	0
RYAN ST3	113	0	5110	0	0	0
RYAN STA	25	0	818	0	0	0
SCHLERASW15	38	0	2289	0	0	0
SCHLERASW19	51	0	3984	0	0	0
SCHLERASW20	91	0	8573	0	0	0
SCHLERK8	21	0	1201	0	0	0
SCHLERKA8	58	0	2172	0	0	0
SCWZERG184	235	8	53787	27	14	1842
SCWZERSG1	537	0	24828	0	0	0
SCWZERSG2	428	0	59777	0	0	0
SEMCO CLINGER	7	0	179	0	0	0
SEMCO MODEL T	5	0	58	0	0	0
SKRSKYS55	13	0	1382	7	3	47
SKRSKYS58	28	0	2742	17	9	87
SKRSKYS76	138	0	40421	88	22	18568
						9081

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
SLINDS100	195	0	12277	144	23	1431
SMITH 600	352	0	50111	320	11	19833
SNIAS AS350	228	0	86782	156	48	16867
SNIAS AS355	146	0	100865	12	18	367
SNIAS SA318	27	0	2511	0	0	0
SNIAS SA341	25	0	2131	14	5	225
SOCATAMS884	36	0	1810	18	7	89
SOCATARALLYE	19	0	1133	17	2	208
SPRTHCIRBUS	83	3	5089	3	3	222
SPRTHINIBUS	40	0	2732	13	6	21
SPRTHVENTUS	48	0	3991	0	0	0
STBROSSD3	31	0	53294	31	0	17108
STINSON10	20	0	1009	6	4	53
STINSONL5	64	0	4100	16	16	78
STINSONSR9	9	0	227	1	1	14
STINSONV77	20	0	402	2	4	1
STOLAMRC3	63	0	3261	19	18	57
SUPAC LA	16	0	300	0	0	0
SUPAC V	6	1	99	3	2	17
SVRNGNSA226	151	0	75954	151	0	22954
SVRNGNSA227	75	0	19449	53	12	3616
SVRNGNSA26	100	0	26429	90	12	4611
						1567



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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
TCRAFK21	20	0	3233	995	12	3	329	123
TCRAFKD	59	8	3428	890	8	8	282	382
TCRAFTA	1	0	77	0	0	0	0	0
TCRAFT8C	1085	0	39228	4452	78	53	133	93
TCRAFT8F	17	0	1058	193	0	0	0	0
TCRAFT8L	44	0	988	814	0	0	0	0
TEMCO 11A	14	0	444	86	3	2	25	18
TH55	25	0	2842	844	17	8	174	82
THUNDERAX7	48	0	1338	238	0	0	0	0
THOMPSONNAVION	434	0	28635	2788	189	25	3003	738
TOMCAT	31	0	7860	982	2	3	95	168
TRYTEK65	101	0	2541	968	0	0	0	0
TRYTEKK	5	0	42	0	0	0	0	0
UNIVACGC1	376	7	20431	2438	148	27	1737	568
UNIVAR108	1350	0	89257	9634	784	131	3838	1612
UNIVAR415	1481	32	58868	5185	573	98	3410	1256
VARGA 2150	122	0	7993	1698	51	23	510	251
VICKER745	20	0	2778	348	20	0	1724	110
WACO ASO	8	0	355	102	0	0	0	0
WACO GXE	6	0	306	137	0	0	0	0
WACO R	15	0	167	36	0	0	0	0
WACO U	4	0	252	8	0	0	0	0

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GENERAL AVIATION ANNUAL HOURS FLOWN  
BY WEATHER AND LIGHT CONDITIONS  
BY SDR MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
WACO UPF7	70	0	1918	489	2	3	28	50
WACO YK	9	0	408	220	0	0	0	0
WSK M18	39	0	7778	1881	2	3	11	13
WTHRLY201	59	0	11805	1114	0	0	0	0
TOTALS	220051	195	30980987	482869	136584	1339	5138229	156381

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
AIRCRAFT TYPE  
1984

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AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT					
	360 CH	720 CH	2+ SYS	NO VHF	4098 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECH	GLIDE SLOPE	MLS	NO ILS	
FIXED WING													
FIXED WING - PISTON													
1 ENG: 1-3 SEATS													
	ESTIMATED POPULATION	37118	20538	10108	31034	24716	3401	61816	14646	7733	5698	255	70911
	% STANDARD ERROR	2.4	4.0	6.0	2.2	3.0	11.5	1.2	4.9	7.0	8.6	40.2	1.0
% WITH CAPABILITY	42.9	23.7	11.7	35.9	28.6	3.9	71.4	16.9	8.9	6.6	0.3	81.9	
1 ENG: 4+ SEATS													
	ESTIMATED POPULATION	57105	72084	85741	4111	103068	48947	18916	90284	85941	77202	1178	28172
	% STANDARD ERROR	2.0	1.5	1.1	8.9	0.7	2.2	3.8	1.0	1.1	1.3	20.2	3.0
% WITH CAPABILITY	46.8	59.1	70.3	3.4	84.5	40.1	15.5	74.0	70.5	63.3	1.0	23.1	
1 ENGINE: TOTAL													
	ESTIMATED POPULATION	94223	92599	95851	35145	127784	52348	80732	104910	93675	82901	1433	99083
	% STANDARD ERROR	1.5	1.5	1.2	2.2	0.8	2.2	1.3	1.1	1.1	1.4	18.1	1.1
% WITH CAPABILITY	45.2	44.4	46.0	16.9	61.3	25.1	38.7	50.3	44.9	39.8	0.7	47.5	
2 ENG: 1-6 SEATS													
	ESTIMATED POPULATION	6216	14034	15954	458	18115	14542	815	18105	18062	17670	274	719
	% STANDARD ERROR	5.6	2.3	1.6	21.3	0.7	2.0	16.1	0.7	0.7	0.9	35.1	15.8
% WITH CAPABILITY	32.8	74.1	84.3	2.4	95.7	76.8	4.3	95.6	95.4	93.3	1.4	3.8	
2 ENG: 7+ SEATS													
	ESTIMATED POPULATION	2673	8270	8098	284	9535	8233	645	9553	9011	9171	83	617
	% STANDARD ERROR	11.3	3.1	3.2	37.5	1.6	2.7	24.0	1.6	2.2	1.9	*	25.3
% WITH CAPABILITY	26.3	81.2	79.6	2.8	93.7	80.9	6.3	93.8	88.5	90.1	0.8	6.1	
2 ENGINE: TOTAL													
	ESTIMATED POPULATION	8890	22304	24052	743	27650	22775	1460	27658	27073	26840	357	1336
	% STANDARD ERROR	5.2	1.8	1.5	19.4	0.7	1.6	13.9	0.7	0.9	0.9	30.2	14.4
% WITH CAPABILITY	30.5	76.6	82.6	2.6	95.0	78.2	5.0	95.0	93.0	92.2	1.2	4.6	
PISTON: OTHER													
	ESTIMATED POPULATION	151	221	309	63	311	149	81	319	319	317	0	73
	% STANDARD ERROR	23.6	19.6	12.7	*	13.6	23.1	*	12.3	12.3	12.3	0.0	*
% WITH CAPABILITY	38.6	58.5	78.8	16.1	79.3	37.9	20.7	81.3	81.3	80.9	0.0	18.7	
PISTON: TOTAL													
	ESTIMATED POPULATION	103264	115125	120212	35951	155745	75272	82272	132886	121066	110059	1790	100492
	% STANDARD ERROR	1.5	1.2	1.0	2.2	0.7	1.6	1.3	0.9	0.9	1.0	15.7	1.1
% WITH CAPABILITY	43.4	48.4	50.5	15.1	65.4	31.6	34.6	55.8	50.9	46.2	0.8	42.2	

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
AIRCRAFT TYPE  
1984

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AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT					
	360 CH	720 CH	2+ SYS	NO VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS	
FIXED WING - TURBOPROP													
2 ENG: 1-12 SEATS													
ESTIMATED POPULATION	858	4641	4407	81	4956	4754	175	5099	5109	5042	137	13	
% STANDARD ERROR	14.8	2.3	2.7	*	1.4	2.0	39.0	0.4	0.3	0.9	39.6	*	
% WITH CAPABILITY	16.7	90.5	85.9	1.2	96.6	92.6	3.4	99.4	99.6	98.3	2.7	0.3	
2 ENG: 13+ SEATS													
ESTIMATED POPULATION	42	664	626	5	677	646	14	684	684	661	5	5	
% STANDARD ERROR	47.8	2.5	5.2	*	2.1	3.6	*	1.7	1.7	2.7	*	*	
% WITH CAPABILITY	6.0	96.1	90.6	0.7	98.0	93.5	2.0	98.9	98.9	95.7	0.8	0.7	
2 ENGINE: TOTAL													
ESTIMATED POPULATION	899	5305	5033	66	5633	5400	189	5782	5793	5703	143	18	
% STANDARD ERROR	14.3	2.0	2.5	*	1.2	1.8	37.0	0.4	0.3	0.9	38.3	*	
% WITH CAPABILITY	15.4	91.1	86.4	1.1	96.8	92.7	3.2	99.3	99.5	98.0	2.5	0.3	
TURBOPROP: OTHER													
ESTIMATED POPULATION	37	93	77	70	113	103	82	113	113	113	0	82	
% STANDARD ERROR	*	21.1	25.7	26.5	9.2	14.5	12.5	9.2	9.2	9.2	0.0	12.5	
% WITH CAPABILITY	18.9	47.9	39.3	35.7	57.7	52.7	42.3	57.7	57.7	57.7	0.0	42.3	
TURBOPROP: TOTAL													
ESTIMATED POPULATION	936	5399	5109	136	5745	5503	272	5895	5905	5815	143	100	
% STANDARD ERROR	14.0	2.0	2.5	34.8	1.2	1.8	26.0	0.5	0.4	0.9	38.3	18.4	
% WITH CAPABILITY	15.6	89.7	84.9	2.3	95.5	91.4	4.5	98.0	98.1	96.7	2.4	1.7	
FIXED WING - TURBOJET													
2 ENGINE TURBOJET													
ESTIMATED POPULATION	442	3828	3577	12	3906	3656	36	3918	3918	3901	90	24	
% STANDARD ERROR	20.6	1.2	2.1	*	0.7	2.0	*	0.5	0.5	0.6	32.3	*	
% WITH CAPABILITY	11.2	97.1	90.7	0.3	99.1	92.8	0.9	99.4	99.4	99.0	2.3	0.6	
TURBOJET: OTHER													
ESTIMATED POPULATION	129	577	613	217	679	605	221	630	625	625	0	270	
% STANDARD ERROR	33.3	8.5	9.5	24.7	7.8	9.7	24.0	9.1	9.2	9.2	0.0	21.3	
% WITH CAPABILITY	14.3	64.1	66.1	24.2	75.5	67.2	24.5	70.0	69.5	69.5	0.0	30.0	
TURBOJET: TOTAL													
ESTIMATED POPULATION	571	4405	4189	229	4586	4261	256	4548	4543	4527	90	294	
% STANDARD ERROR	17.7	1.5	2.3	24.7	1.3	2.2	23.4	1.3	1.3	1.4	32.3	20.7	
% WITH CAPABILITY	11.8	91.0	86.5	4.7	94.7	88.0	5.3	93.9	93.8	93.5	1.9	6.1	

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
AIRCRAFT TYPE  
1984

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AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
FIXED WING: TOTAL												
ESTIMATED POPULATION	104771	124929	129511	36318	166076	85036	82800	143329	131515	120401	2023	100887
% STANDARD ERROR	1.5	1.2	0.9	2.2	0.6	1.4	1.3	0.8	0.8	1.0	14.2	1.1
% WITH CAPABILITY	42.1	50.2	52.0	14.6	66.7	34.2	33.3	57.6	52.8	48.4	0.8	40.5
ROTORCRAFT												
PISTON												
ESTIMATED POPULATION	1837	1305	615	2491	1197	117	4319	105	62	69	4	5407
% STANDARD ERROR	10.0	12.9	21.9	6.4	13.2	*	3.7	*	*	*	*	1.1
% WITH CAPABILITY	33.3	23.7	11.2	45.2	21.7	2.1	78.3	1.9	1.1	1.2	0.1	98.0
TURBINE												
ESTIMATED POPULATION	1151	3461	2143	254	3470	1345	1304	1583	1010	1099	13	3180
% STANDARD ERROR	14.4	4.8	8.8	27.0	4.9	12.6	13.1	11.4	14.7	13.6	*	5.7
% WITH CAPABILITY	24.1	72.5	44.9	5.3	72.7	28.2	27.3	33.2	21.2	23.0	0.3	66.6
ROTORCRAFT: TOTAL												
ESTIMATED POPULATION	2988	4766	2758	2745	4666	1461	5624	1688	1072	1168	17	8587
% STANDARD ERROR	8.3	5.0	8.4	6.3	5.0	12.6	4.1	11.2	14.5	13.4	*	2.2
% WITH CAPABILITY	29.0	46.3	26.8	26.7	45.3	14.2	54.7	16.4	10.4	11.3	0.2	83.5
OTHER												
ESTIMATED POPULATION	2148	1779	155	4341	431	256	7828	78	47	45	45	8176
% STANDARD ERROR	7.7	10.0	38.6	4.7	23.4	32.8	1.3	*	*	*	*	0.5
% WITH CAPABILITY	26.0	21.5	1.9	52.6	5.2	3.1	94.8	0.9	0.6	0.5	0.5	99.0
TOTAL												
ESTIMATED POPULATION	109906	131474	132424	43403	171173	86753	96252	145085	132634	121614	2085	117650
% STANDARD ERROR	1.4	1.1	0.9	1.9	0.6	1.4	1.1	0.8	0.8	1.0	14.0	1.0
% WITH CAPABILITY	41.1	49.2	49.5	16.2	64.0	32.4	36.0	54.3	49.6	45.5	0.8	44.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
AIRCRAFT TYPE  
1984

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AIRCRAFT TYPE	VOR NAVIGATION EQUIPMENT						LONG RANGE NAV. EQUIP.				OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLYING COMPT	WEATHER RADAR	NO NAVEQ	
FIXED WING															
FIXED WING - PISTON															
1 ENG: 1-3 SEATS															
ESTIMATED POPULATION	27872	21978	9229	7800	1830	583	2089	93	176	110	122	188	308	37434	
% STANDARD ERROR	3.1	3.7	6.2	7.2	18.9	24.7	14.9	*	49.6	*	*	43.0	33.6	1.8	
% WITH CAPABILITY	32.0	25.4	10.7	9.0	1.9	0.7	2.4	0.1	0.2	0.1	0.1	0.2	0.4	43.3	
1 ENG: 4+ SEATS															
ESTIMATED POPULATION	45908	78975	95182	86507	48880	11835	10185	307	384	3278	5510	1127	2580	4189	
% STANDARD ERROR	2.4	1.4	0.9	1.1	2.1	5.6	8.3	0.3	33.9	11.5	8.2	20.3	13.3	8.2	
% WITH CAPABILITY	37.6	64.7	78.0	70.9	40.1	9.7	8.3	0.3	0.3	2.7	4.5	0.8	2.1	3.4	
1 ENGINE: TOTAL															
ESTIMATED POPULATION	73578	100851	104411	94307	50510	12418	12254	400	540	3388	5632	1312	2889	41602	
% STANDARD ERROR	1.8	1.3	1.0	1.2	2.1	5.5	5.8	0.2	28.0	11.2	8.1	18.5	12.4	1.8	
% WITH CAPABILITY	35.3	48.4	50.1	45.2	24.2	8.0	5.9	0.2	0.3	1.6	2.7	0.6	1.4	20.0	
2 ENG: 1-8 SEATS															
ESTIMATED POPULATION	4885	15014	18052	17884	18784	6883	2170	51	18	4083	5300	1335	8044	444	
% STANDARD ERROR	8.7	2.0	0.7	0.8	1.3	4.8	11.0	*	*	7.2	5.8	13.9	4.9	20.6	
% WITH CAPABILITY	25.6	79.3	85.4	84.5	88.8	36.4	11.5	0.3	0.1	21.5	28.0	7.1	31.8	2.3	
2 ENG: 7+ SEATS															
ESTIMATED POPULATION	1768	8281	9117	9235	8749	4688	1484	213	68	3884	4316	1221	5815	287	
% STANDARD ERROR	14.4	2.9	2.0	1.9	1.9	6.1	14.8	47.8	*	8.1	6.3	15.4	4.6	35.9	
% WITH CAPABILITY	17.4	81.4	89.6	80.7	86.0	48.1	14.4	2.1	0.8	38.0	42.4	12.0	55.2	2.8	
2 ENGINE: TOTAL															
ESTIMATED POPULATION	6853	23305	27188	27120	25513	11571	3634	284	82	7727	9617	2556	11859	731	
% STANDARD ERROR	8.2	1.6	0.8	0.8	1.1	3.8	8.9	41.0	*	4.8	4.2	10.3	3.4	18.8	
% WITH CAPABILITY	22.9	80.1	93.3	93.2	87.6	39.6	12.5	0.9	0.3	26.5	33.0	8.6	40.1	2.5	
PISTON: OTHER															
ESTIMATED POPULATION	88	308	301	244	204	14	22	1	0	32	1	2	128	82	
% STANDARD ERROR	39.5	13.5	13.6	13.1	15.0	*	*	*	0.0	*	*	*	28.1	*	
% WITH CAPABILITY	22.4	78.0	78.7	62.3	52.0	3.5	5.6	0.3	0.0	8.1	0.3	0.6	32.1	15.8	
PISTON: TOTAL															
ESTIMATED POPULATION	80318	124582	131880	121870	78227	24004	15910	885	821	11144	15249	3870	14874	42395	
% STANDARD ERROR	1.8	1.1	0.6	0.8	1.4	3.4	4.9	23.4	26.3	4.8	4.0	9.3	3.6	1.8	
% WITH CAPABILITY	33.7	52.3	55.4	51.1	32.0	10.1	6.7	0.3	0.3	4.7	6.4	1.8	6.2	17.8	

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
AIRCRAFT TYPE  
1984

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AIRCRAFT TYPE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.				OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ
FIXED WING - TURBOPROP														
2 ENG: 1-12 SEATS														
ESTIMATED POPULATION	625	4639	5089	5056	5041	3995	720	440	230	4443	4527	755	4633	5
% STANDARD ERROR	19.2	2.3	0.7	0.8	0.9	3.3	15.2	20.9	33.9	2.5	2.4	16.5	2.1	*
% WITH CAPABILITY	12.2	90.4	98.8	98.5	98.2	77.9	14.0	8.6	4.5	86.6	88.2	14.7	90.3	0.1
2 ENG: 13+ SEATS														
ESTIMATED POPULATION	71	626	681	653	625	229	60	73	14	387	363	127	599	7
% STANDARD ERROR	30.4	3.5	2.0	4.1	5.0	19.1	49.2	41.2	*	10.6	10.6	28.7	5.8	*
% WITH CAPABILITY	10.3	90.6	98.6	94.5	90.5	33.2	8.7	10.5	2.1	56.0	52.5	18.4	86.7	1.1
2 ENGINE: TOTAL														
ESTIMATED POPULATION	696	5265	5749	5709	5668	4225	780	513	244	4830	4890	882	5232	13
% STANDARD ERROR	17.5	2.1	0.7	0.9	1.0	3.3	14.6	18.9	32.5	2.4	2.3	14.7	2.0	*
% WITH CAPABILITY	12.0	90.4	98.8	98.1	97.3	72.6	13.4	8.8	4.2	83.0	84.0	15.2	89.9	0.2
TURBOPROP: OTHER														
ESTIMATED POPULATION	28	88	113	113	110	5	0	15	45	63	83	15	88	79
% STANDARD ERROR	*	20.9	9.2	9.2	10.7	*	0.0	*	43.8	30.6	22.9	*	20.9	16.7
% WITH CAPABILITY	14.3	45.0	57.7	57.7	58.5	2.5	0.0	7.6	22.8	32.4	42.5	7.6	45.0	40.6
TURBOPROP: TOTAL														
ESTIMATED POPULATION	724	5352	5862	5822	5776	4229	780	528	289	4893	4972	897	5320	92
% STANDARD ERROR	17.0	2.1	0.7	0.9	1.0	3.3	14.6	18.5	28.3	2.4	2.3	14.5	2.0	22.0
% WITH CAPABILITY	12.0	89.0	97.4	96.8	96.0	70.3	13.0	8.8	4.8	81.3	82.6	14.9	88.4	1.5
FIXED WING - TURBOJET														
2 ENGINE TURBOJET														
ESTIMATED POPULATION	249	3754	3917	3928	3910	2091	343	2349	548	3740	3791	930	3796	14
% STANDARD ERROR	25.7	1.5	0.5	0.5	0.6	5.9	23.6	5.2	13.8	1.4	1.2	11.7	1.2	*
% WITH CAPABILITY	6.3	95.2	99.4	99.6	99.2	53.0	8.7	59.6	13.9	94.9	96.2	23.6	96.3	0.4
TURBOJET: OTHER														
ESTIMATED POPULATION	136	599	609	576	662	138	21	328	301	551	605	149	506	221
% STANDARD ERROR	32.6	10.1	9.6	10.0	8.3	26.6	*	12.7	16.6	10.4	9.6	21.7	11.1	24.0
% WITH CAPABILITY	15.1	66.6	67.7	64.0	73.6	15.4	2.3	36.5	33.5	61.3	67.2	16.6	56.2	24.5
TURBOJET: TOTAL														
ESTIMATED POPULATION	384	4353	4526	4504	4572	2229	364	2677	850	4292	4398	1079	4302	235
% STANDARD ERROR	20.2	1.9	1.4	1.3	1.3	5.7	22.7	4.8	10.7	1.8	1.6	10.5	1.7	23.9
% WITH CAPABILITY	7.9	89.6	93.5	93.0	94.4	46.0	7.5	55.3	17.5	88.6	90.8	22.3	86.8	4.8

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
AIRCRAFT TYPE  
1984

PAGE 8 OF 8

AIRCRAFT TYPE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.			OTHER NAVIGATION EQUIPMENT					
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	NAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLYING COMPT	WEATHER RADAR	NO NAVEQ
FIXED WING: TOTAL														
	81427	134287	142288	131898	88575	30482	17054	3889	1780	20329	24818	5847	24298	42722
	1.8	1.0	0.7	0.9	1.3	2.7	4.7	5.8	11.3	2.7	2.5	6.8	2.3	1.8
% STANDARD ERROR														
% WITH CAPABILITY	32.7	53.9	57.2	53.0	34.8	12.2	8.9	1.6	0.7	8.2	9.9	2.3	9.8	17.2
ROTORCRAFT														
PISTON														
	272	201	36	358	28	20	248	2	0	3	2	2	3	4581
	30.8	30.3	*	25.1	*	*	29.2	*	0.0	*	*	*	*	2.8
% STANDARD ERROR														
% WITH CAPABILITY	4.9	3.7	0.6	6.5	0.5	0.4	4.5	0.0	0.0	0.1	0.0	0.0	0.1	83.0
TURBINE														
	726	2507	1084	2696	1245	714	1544	64	101	922	427	69	318	799
	19.4	7.5	14.6	7.2	13.0	19.0	11.7	*	*	15.1	20.3	48.0	15.6	14.4
% STANDARD ERROR														
% WITH CAPABILITY	15.2	52.5	22.7	56.5	26.1	15.0	32.3	1.3	2.1	19.3	8.9	1.5	6.6	16.7
ROTORCRAFT: TOTAL														
	997	2708	1120	3053	1273	734	1793	85	101	925	428	71	319	5380
	18.5	7.3	14.5	7.0	13.0	18.6	10.8	*	*	15.1	20.3	47.3	15.6	3.2
% STANDARD ERROR														
% WITH CAPABILITY	9.7	26.3	10.9	29.7	12.4	7.1	17.4	0.6	1.0	9.0	4.2	0.7	3.1	52.3
OTHER														
	128	113	48	44	65	48	59	42	42	54	50	48	44	8016
	45.6	38.4	*	*	*	*	*	*	*	*	*	*	*	0.8
% STANDARD ERROR														
% WITH CAPABILITY	1.5	1.4	0.6	0.5	0.8	0.6	0.7	0.5	0.5	0.7	0.8	0.6	0.5	97.1
TOTAL														
	82552	137088	143436	135093	87913	31244	18906	3978	1903	21309	25097	5966	24659	56117
	1.8	1.0	0.7	0.8	1.3	2.7	4.3	5.9	11.0	2.7	2.5	6.7	2.2	1.4
% STANDARD ERROR														
% WITH CAPABILITY	30.9	51.3	53.6	50.5	32.9	11.7	7.1	1.5	0.7	8.0	9.4	2.2	9.2	21.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.



TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
BASE STATE OF AIRCRAFT  
1984

PAGE 1 OF 14

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4098 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
ALABAMA	1308	1786	1804	665	2413	1408	1298	2268	2021	1943	2	1401
	18.9	15.3	15.2	24.1	13.4	16.9	18.1	13.9	14.7	15.0	*	17.1
	35.3	48.1	48.6	17.9	65.0	38.0	35.0	61.1	54.7	52.4	0.1	37.8
ALASKA	4799	3738	2829	651	3422	1060	5027	2904	2523	2234	166	5416
	8.2	9.5	10.6	24.0	9.7	18.1	7.9	10.1	11.2	11.7	39.1	7.8
	56.8	44.2	33.5	7.7	40.5	12.6	59.5	34.4	29.9	26.4	2.0	64.1
ARIZONA	2323	2980	3079	1282	4302	1884	1903	3141	2776	2607	4	2880
	13.6	12.2	11.9	16.3	10.2	14.9	13.2	11.9	12.5	12.9	*	11.3
	37.4	48.0	49.6	20.7	69.3	30.4	30.7	50.6	44.7	42.0	0.1	46.4
ARKANSAS	1197	1442	1334	705	1809	980	1310	1331	1308	1230	34	1783
	18.6	16.5	17.1	21.6	14.7	19.9	16.7	17.2	17.4	17.9	*	14.4
	38.4	46.2	42.8	22.6	58.0	30.8	42.0	42.7	41.9	39.4	1.1	57.2
CALIFORNIA	14435	17989	17973	4673	24595	13373	10281	20587	18527	17332	304	13974
	5.2	4.7	4.6	8.2	3.9	5.4	5.7	4.3	4.5	4.7	41.1	5.0
	41.4	51.5	51.5	13.4	70.5	38.3	29.5	59.0	53.1	49.7	0.9	40.1
COLORADO	1992	3112	2728	704	3678	2441	1818	3175	2862	2886	65	2234
	14.4	11.8	12.7	21.7	10.8	13.4	14.1	11.6	12.3	12.3	*	13.0
	36.2	56.6	49.6	12.8	66.9	44.4	33.1	57.8	52.1	52.5	1.2	40.7
CONNECTICUT	676	1216	1088	327	1356	363	719	1182	1095	986	42	824
	25.1	18.7	20.0	32.9	18.0	22.8	22.1	19.3	20.0	21.1	*	20.9
	32.6	58.6	52.4	15.8	65.3	41.6	34.7	57.0	52.8	47.5	2.0	39.7
DELAWARE	243	372	428	95	489	236	214	435	439	376	0	258
	42.3	31.2	30.2	*	28.1	35.1	41.1	28.8	29.6	31.7	0.0	38.0
	34.6	52.9	60.9	13.6	69.5	33.5	30.5	61.9	62.5	53.5	0.0	36.7

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
BASE STATE OF AIRCRAFT  
1984

PAGE 2 OF 14

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
D.C.												
	ESTIMATED POPULATION	16	32	33	5	21	14	30	30	29	0	13
	% STANDARD ERROR	*	*	*	*	*	*	*	*	*	0.0	*
	% WITH CAPABILITY	36.8	73.2	75.1	11.0	88.7	49.1	31.3	69.4	66.6	0.0	30.8
FLORIDA												
	ESTIMATED POPULATION	5314	8104	8295	1521	6042	4108	9007	8081	7469	48	5145
	% STANDARD ERROR	9.0	7.0	6.9	14.1	7.9	9.6	6.7	6.9	7.1	*	8.8
	% WITH CAPABILITY	37.3	58.9	58.3	10.7	42.4	28.9	63.3	56.8	52.5	0.3	36.1
GEORGIA												
	ESTIMATED POPULATION	2343	2315	2540	848	1768	1728	2833	2745	2408	147	2052
	% STANDARD ERROR	13.8	13.3	12.8	20.3	14.5	14.7	12.2	12.4	13.1	*	13.9
	% WITH CAPABILITY	46.0	45.5	49.9	16.7	34.7	33.9	55.7	53.9	47.3	2.9	40.3
HAWAII												
	ESTIMATED POPULATION	311	214	188	34	70	107	215	181	184	8	319
	% STANDARD ERROR	37.5	45.5	48.4	*	*	*	44.5	48.5	48.9	*	37.4
	% WITH CAPABILITY	56.9	39.2	34.3	6.2	12.9	19.5	39.3	33.1	33.7	1.5	58.4
IDAHO												
	ESTIMATED POPULATION	1278	1050	936	547	642	980	1087	1017	973	0	1524
	% STANDARD ERROR	17.9	21.2	21.8	26.8	26.1	19.4	20.0	21.1	21.4	0.0	16.4
	% WITH CAPABILITY	48.4	39.8	35.4	20.7	24.3	37.1	41.2	36.5	36.8	0.0	57.7
ILLINOIS												
	ESTIMATED POPULATION	3680	5212	5631	1824	3521	3391	6192	5981	5265	93	3527
	% STANDARD ERROR	10.8	9.2	8.8	13.8	11.0	10.6	8.4	8.6	9.1	*	10.3
	% WITH CAPABILITY	37.0	52.4	56.6	18.3	35.4	34.1	62.3	60.1	52.9	0.9	35.5
INDIANA												
	ESTIMATED POPULATION	1827	2022	2386	792	1160	1759	2334	2078	1821	10	1883
	% STANDARD ERROR	15.0	14.4	13.4	22.4	18.5	14.7	13.5	14.4	15.2	*	14.0
	% WITH CAPABILITY	42.3	46.8	55.3	18.3	26.9	40.7	54.0	48.1	42.2	0.2	43.6
IOWA												
	ESTIMATED POPULATION	1319	1845	1603	819	952	1408	1913	1678	1452	3	1847
	% STANDARD ERROR	18.0	15.7	16.6	19.9	20.9	16.3	15.1	16.0	17.2	*	14.7
	% WITH CAPABILITY	34.5	48.2	41.9	21.4	24.9	36.8	50.0	43.8	38.0	0.1	48.3

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
KANSAS	1599	1952	2221	875	2640	1239	1582	2248	2308	1930	5	1819
	16.0	14.7	13.9	20.8	12.7	17.9	15.5	13.8	13.8	15.0	*	14.4
	37.9	46.2	52.6	20.7	62.5	29.4	37.5	53.2	54.7	45.7	0.1	43.1
KENTUCKY	728	949	985	298	1368	501	511	1159	1098	999	5	670
	25.1	21.6	21.2	38.0	18.3	27.3	28.8	19.9	20.5	21.3	*	25.1
	38.8	50.6	51.4	15.9	72.8	26.7	27.2	61.8	58.4	53.3	0.3	35.7
LOUISIANA	1684	2421	2408	909	3059	1435	1689	2398	2164	1963	33	2291
	16.2	12.2	12.8	18.9	11.3	15.9	14.5	12.9	13.8	14.4	*	12.1
	35.5	51.0	50.7	19.1	64.4	30.2	35.6	50.5	45.6	41.3	0.7	48.2
MAINE	462	478	423	389	552	249	709	453	448	389	6	752
	30.4	29.5	31.9	30.2	27.7	41.8	23.2	30.3	31.9	33.8	*	22.4
	36.7	37.9	33.5	30.8	43.8	19.7	56.2	35.9	35.5	30.9	0.5	59.6
MARYLAND	1302	1493	1622	490	2252	1207	857	1709	1604	1502	4	1336
	18.0	17.3	16.2	26.1	14.1	18.9	19.7	16.0	16.4	17.2	*	17.1
	41.9	48.0	52.2	15.7	72.4	38.8	27.6	55.0	51.6	48.3	0.1	43.0
MASSACHUSETTS	1600	1817	1741	346	2371	1229	1189	1971	1849	1556	0	1486
	16.4	15.4	16.1	30.6	13.5	18.8	18.6	14.8	15.5	16.8	0.0	16.4
	44.9	51.0	48.9	9.7	66.6	34.5	33.4	55.4	51.9	43.7	0.0	41.8
MICHIGAN	3724	4032	3947	1122	5004	2308	3128	4261	3733	3411	76	3677
	10.7	10.2	10.4	16.1	9.2	13.2	10.8	9.9	10.5	11.0	*	10.1
	45.8	49.6	48.5	13.8	61.5	28.4	38.5	52.4	45.9	42.0	0.9	45.2
MINNESOTA	2403	2511	2241	1370	2927	1221	2933	2355	2042	1952	41	3435
	12.8	12.9	13.5	15.8	12.0	17.9	10.9	13.2	14.1	14.5	*	10.4
	41.0	42.8	38.2	23.4	49.9	20.8	50.1	40.2	34.8	33.3	0.7	58.6

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
MISSISSIPPI												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												
MISSOURI												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												
MONTANA												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												
NEBRASKA												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												
NEVADA												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												
NEW HAMPSHIRE												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												
NEW JERSEY												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												
NEW MEXICO												
	ESTIMATED POPULATION											
	% STANDARD ERROR											
% WITH CAPABILITY												

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
NEW YORK												
	ESTIMATED POPULATION	3432	3268	3730	1380	4451	2389	3085	4096	3672	3393	50
	% STANDARD ERROR	11.2	11.2	10.8	18.0	9.8	13.2	11.1	10.2	10.8	11.3	*
% WITH CAPABILITY	45.5	43.3	49.5	18.3	59.1	31.4	40.9	54.4	48.7	45.0	0.7	45.3
NORTH CAROLINA												
	ESTIMATED POPULATION	1539	2782	2505	479	3459	1690	1119	2882	2680	2589	53
	% STANDARD ERROR	18.7	12.4	13.0	29.0	11.2	15.5	19.0	12.2	12.5	12.7	*
% WITH CAPABILITY	33.6	60.8	54.7	10.5	75.6	36.9	24.4	63.0	58.1	56.5	1.1	35.9
NORTH DAKOTA												
	ESTIMATED POPULATION	765	397	528	715	588	243	1217	559	512	498	14
	% STANDARD ERROR	24.7	33.1	28.8	23.8	27.5	41.7	18.9	28.3	29.7	30.4	*
% WITH CAPABILITY	42.9	22.2	29.6	40.0	31.8	13.6	68.2	31.3	28.7	27.8	0.8	68.4
OHIO												
	ESTIMATED POPULATION	3707	4432	4435	1305	5663	2873	3008	4982	4376	3842	3
	% STANDARD ERROR	11.1	9.8	9.9	15.5	8.8	12.5	11.2	9.3	9.9	10.4	*
% WITH CAPABILITY	42.8	51.1	51.2	15.0	65.3	30.8	34.7	57.2	50.5	44.3	0.0	40.3
OK' AHOMA												
	ESTIMATED POPULATION	2413	2892	3063	814	4198	2302	1867	3352	3036	2948	0
	% STANDARD ERROR	13.6	12.3	12.0	21.1	10.3	13.7	15.3	11.4	12.0	12.2	0.0
% WITH CAPABILITY	41.2	49.3	52.2	13.9	71.6	39.3	28.4	57.2	51.8	50.2	0.0	40.9
OREGON												
	ESTIMATED POPULATION	2582	2958	2472	686	3412	1499	2330	2582	2417	2298	0
	% STANDARD ERROR	12.5	12.1	12.9	22.2	11.2	16.1	12.7	12.8	13.1	13.5	0.0
% WITH CAPABILITY	45.0	51.5	43.0	11.9	59.4	26.1	40.6	45.0	42.1	40.0	0.0	52.4
PENNSYLVANIA												
	ESTIMATED POPULATION	3144	3047	3312	1366	4599	2441	2699	4077	3523	3239	91
	% STANDARD ERROR	11.7	11.3	11.0	15.7	9.5	12.5	11.6	10.1	10.6	11.1	*
% WITH CAPABILITY	43.1	41.8	45.4	18.7	63.0	33.4	37.0	55.9	48.3	44.4	1.2	41.6
RHODE ISLAND												
	ESTIMATED POPULATION	207	181	166	40	324	169	93	291	205	178	2
	% STANDARD ERROR	47.5	48.1	50.0	*	37.5	48.2	*	39.7	44.7	47.4	*
% WITH CAPABILITY	49.8	43.5	40.0	9.6	77.8	40.6	22.2	69.9	49.3	42.2	0.4	29.5

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
SOUTH CAROLINA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	860 23.7 48.2	745 22.7 41.8	945 21.3 53.0	255 34.5 14.3	1263 18.6 70.8	510 26.5 28.6	521 26.7 29.2	1232 18.9 69.0	1076 19.9 60.3	946 20.8 53.0	13 * 0.7	553 26.1 31.0
SOUTH DAKOTA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	584 27.1 38.5	692 26.5 45.6	680 26.5 44.9	373 30.2 24.6	746 24.7 49.2	237 41.4 15.6	770 22.6 50.8	726 25.5 47.9	661 26.6 43.6	683 26.5 45.1	36 * 2.4	784 22.0 51.7
TENNESSEE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1378 17.3 42.8	1679 16.3 52.2	1783 15.5 55.4	605 26.5 18.8	2240 14.0 69.6	1197 18.5 37.2	978 20.8 30.4	1962 14.6 61.0	1787 15.3 55.5	1495 16.6 46.4	0 0.0 0.0	1229 19.2 38.2
TEXAS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	8049 7.3 36.6	11842 5.7 53.8	12095 5.6 54.9	3756 10.0 17.1	14951 5.1 67.9	8611 6.5 39.1	7088 7.3 32.1	13116 5.4 59.6	12269 5.6 55.7	11432 5.7 51.9	236 42.3 1.1	8440 8.7 38.3
UTAH ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	555 27.7 39.8	773 23.5 55.4	725 24.0 52.0	104 * 7.4	1003 20.8 71.9	498 29.5 35.7	392 32.5 28.1	799 23.3 57.3	713 24.3 51.1	647 25.7 46.4	4 * 0.3	569 27.7 40.8
VERMONT ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	188 43.1 32.3	299 34.3 51.2	298 35.3 51.0	140 * 23.9	307 33.1 52.5	241 37.8 41.3	277 37.6 47.5	325 33.9 55.8	283 34.9 48.5	274 35.7 47.0	0 0.0 0.0	252 37.3 43.2
VIRGINIA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1374 18.1 39.7	1643 15.9 47.5	1692 15.6 48.9	598 25.6 17.3	2268 13.7 65.6	1245 18.0 36.0	1190 18.8 34.4	1886 15.0 54.5	1725 15.5 49.9	1603 16.1 46.3	67 * 1.9	1509 16.9 43.6
WASHINGTON ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	3149 11.5 41.3	3514 10.7 46.1	3506 10.8 46.0	1479 16.3 19.4	4382 9.7 57.5	1605 15.7 21.1	3241 11.1 42.5	3630 10.8 47.6	3510 11.0 46.0	3070 11.8 40.3	15 * 0.5	3706 10.3 48.6

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4098 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
WEST VIRGINIA												
	338	509	572	204	817	320	402	818	581	504	72	334
	33.9	27.6	28.5	44.6	24.9	34.2	31.9	25.3	28.9	27.9	*	32.4
% WITH CAPABILITY	33.2	50.0	56.1	20.0	80.6	31.3	39.4	80.4	55.1	49.4	7.1	32.7
WISCONSIN												
	2167	2039	2188	1044	2592	1001	2426	2059	1948	1598	14	2852
	14.2	14.5	14.0	18.5	12.7	19.2	12.9	14.2	14.5	15.8	*	12.0
% WITH CAPABILITY	43.2	40.6	43.2	20.8	51.7	20.0	48.3	41.0	38.8	31.8	0.3	56.8
WYOMING												
	703	742	874	193	1098	548	505	796	701	659	0	800
	28.0	23.6	22.1	41.8	20.0	28.3	28.8	23.3	24.8	25.7	0.0	23.2
% WITH CAPABILITY	43.9	46.4	54.6	12.0	68.4	34.2	31.6	49.7	43.8	41.1	0.0	50.0
PUERTO RICO												
	310	228	289	15	292	90	181	252	228	220	2	190
	36.0	41.0	35.0	*	35.5	*	*	36.1	38.1	37.2	*	*
% WITH CAPABILITY	68.5	50.4	63.9	3.4	84.4	20.0	35.6	55.8	50.3	48.7	0.5	41.9
OTHER U. S. TERRITORIES												
	23	82	60	2	73	30	14	70	68	64	0	14
	*	*	*	*	*	*	*	*	*	*	0.0	*
% WITH CAPABILITY	26.0	72.0	68.7	1.9	83.7	34.3	16.3	80.2	76.1	73.4	0.0	16.6
FOREIGN												
	566	1003	1058	205	1154	701	572	1139	1082	1075	7	578
	26.0	18.8	18.4	45.0	17.5	22.0	27.3	17.7	17.9	18.0	*	27.2
% WITH CAPABILITY	32.8	58.1	61.2	11.9	66.9	40.6	33.1	66.0	62.7	62.3	0.4	33.5
TOTAL												
	109908	131474	132424	43403	171173	86753	98252	145095	132634	121614	2085	117850
	1.4	1.1	0.9	1.9	0.8	1.4	1.1	0.8	0.8	1.0	14.0	1.0
% WITH CAPABILITY	41.1	49.2	49.5	16.2	64.0	32.4	36.0	54.3	49.6	45.5	0.8	44.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.

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STATE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.					OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT CMPTR	WEATHER RADAR	NO NAVEQ	
ALABAMA	838	2083	2196	1948	1448	657	517	55	19	320	554	113	637	822	
	23.4	14.5	14.2	14.8	16.8	23.4	29.9	*	*	28.9	23.4	47.7	24.9	21.8	
	22.6	56.1	59.2	52.5	39.0	17.7	13.9	1.5	0.5	8.6	14.9	3.1	17.2	22.2	
ALASKA	3737	3496	2691	4381	1498	533	866	156	153	472	286	164	283	1302	
	9.6	9.6	11.0	8.3	13.7	21.7	19.6	41.0	41.5	23.8	29.6	39.6	29.7	16.3	
	44.2	41.4	31.9	51.9	17.7	6.3	10.2	1.8	1.8	5.6	3.4	1.9	3.4	15.4	
ARIZONA	1838	3240	3201	2782	1848	611	223	17	3	213	319	85	194	1346	
	15.4	11.7	11.7	12.5	15.2	26.6	47.2	*	*	41.2	32.9	*	35.7	15.2	
	29.6	52.2	51.6	44.8	29.8	9.8	3.6	0.3	0.1	3.4	5.1	1.4	3.1	21.7	
ARKANSAS	762	1520	1590	1564	1093	465	215	32	2	270	313	25	308	923	
	23.3	16.3	16.0	16.0	19.0	26.3	38.5	*	*	34.5	31.3	*	30.8	18.8	
	24.4	48.7	51.0	50.1	34.1	14.9	6.9	1.0	0.1	8.7	10.0	0.8	9.8	29.6	
CALIFORNIA	10203	18924	19293	15908	11949	2739	1980	488	235	2280	2784	1139	2053	6941	
	6.3	4.6	4.4	4.8	5.6	11.0	14.8	25.7	34.1	11.1	10.4	17.6	11.7	6.7	
	29.3	53.4	55.3	45.3	34.3	7.9	5.7	1.4	0.7	6.5	8.0	3.3	5.9	19.9	
COLORADO	1420	3062	3157	2886	2308	670	152	60	2	544	407	233	339	1093	
	17.2	12.0	11.8	12.2	13.7	24.8	49.1	*	*	25.4	27.0	38.6	28.3	17.1	
	25.8	55.7	57.5	52.5	42.0	12.2	2.8	1.1	0.0	9.9	7.4	4.2	6.2	19.9	
CONNECTICUT	462	1228	1172	1088	596	185	77	4	26	135	192	37	210	449	
	30.1	19.0	19.3	20.3	25.4	48.4	*	*	*	*	40.1	*	38.8	26.4	
	22.3	59.2	59.5	51.5	28.2	8.9	3.7	0.2	1.3	6.5	9.2	1.8	10.1	21.7	
DELAWARE	211	346	419	424	288	140	70	33	34	123	128	47	127	112	
	47.6	31.7	29.6	30.9	33.7	40.7	*	*	*	38.8	37.6	*	37.2	48.9	
	30.0	49.1	59.6	60.3	41.0	19.9	10.0	4.7	4.8	17.5	18.1	6.7	18.1	15.9	

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%



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STATE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.			OTHER NAVIGATION EQUIPMENT					
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ
D.C.	11	30	26	25	24	15	7	0	0	11	11	2	11	12
	%	%	%	%	%	%	%	0.0	0.0	%	%	%	%	%
	25.7	68.0	60.6	56.6	54.9	35.1	16.1	0.0	0.0	24.8	24.8	4.8	24.8	27.1
FLORIDA	4099	8595	8948	8299	5748	1705	1124	91	34	1885	1878	437	1867	2058
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	28.8	60.4	62.8	58.3	40.4	12.0	7.9	0.6	0.2	11.8	11.8	3.1	13.1	14.4
GEORGIA	2024	2621	2885	2856	1651	618	724	83	62	340	498	87	557	1050
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	14.9	12.7	12.1	12.1	14.8	22.5	22.8	43.6	%	27.4	23.7	41.1	22.4	18.5
HAWAII	232	224	187	163	150	20	7	1	0	14	17	4	5	81
	%	%	%	%	%	%	%	%	0.0	%	%	%	%	%
	42.5	41.0	34.3	29.9	27.4	3.6	1.2	0.3	0.0	2.6	3.0	0.8	0.9	14.8
IDAHO	1068	1057	1079	1232	651	170	155	17	41	85	77	48	85	818
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	40.4	40.0	40.8	46.6	24.7	6.4	5.9	0.6	1.5	3.2	2.9	1.8	3.2	23.3
ILLINOIS	2787	5365	6016	5741	3703	1554	715	159	41	824	810	120	979	2139
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	28.0	53.9	60.5	57.7	37.2	15.6	7.2	1.6	0.4	8.3	8.1	1.2	9.8	21.5
INDIANA	1516	2044	2414	2215	1250	492	283	73	18	391	396	85	625	966
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	35.1	47.3	55.9	51.3	28.9	11.4	6.6	1.7	0.4	9.1	9.2	1.5	14.5	22.4
IOWA	1236	1715	1775	1678	1160	380	169	17	27	260	333	30	368	961
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	32.3	44.8	46.4	43.9	30.3	9.9	4.4	0.4	0.7	6.8	8.7	0.8	10.1	25.1

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.				OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ
KANSAS														
	ESTIMATED POPULATION	1332	2082	2462	1583	495	228	76	5	293	279	61	317	1061
	% STANDARD ERROR	17.8	14.2	13.3	16.2	27.1	41.2	44.9	*	30.3	31.1	*	30.2	18.8
% WITH CAPABILITY	31.6	48.8	58.3	55.7	37.5	11.7	5.4	1.8	0.1	6.9	6.6	1.4	7.5	25.1
KENTUCKY														
	ESTIMATED POPULATION	616	983	1135	683	171	126	25	1	214	169	24	201	332
	% STANDARD ERROR	27.8	21.3	20.2	25.3	48.2	*	*	*	37.6	40.2	*	35.5	35.3
% WITH CAPABILITY	32.8	52.4	60.5	59.1	36.4	9.1	6.7	1.3	0.1	11.4	9.0	1.3	10.7	17.7
LOUISIANA														
	ESTIMATED POPULATION	1207	2349	2189	1607	594	800	45	5	413	508	146	611	1011
	% STANDARD ERROR	19.1	12.7	13.8	15.3	24.2	19.2	*	*	24.1	25.3	44.3	22.4	17.5
% WITH CAPABILITY	25.4	49.5	45.7	54.7	33.8	12.5	16.9	0.9	0.1	8.7	10.7	3.1	12.9	21.3
MAINE														
	ESTIMATED POPULATION	414	468	462	117	50	100	2	7	78	35	11	48	420
	% STANDARD ERROR	33.0	29.3	30.4	28.4	46.8	*	*	*	*	*	*	*	28.4
% WITH CAPABILITY	32.8	37.1	36.7	41.5	9.3	4.0	7.9	0.1	0.5	6.2	2.8	0.9	3.8	33.3
MARYLAND														
	ESTIMATED POPULATION	1088	1534	1770	898	251	343	15	13	114	127	32	161	573
	% STANDARD ERROR	20.4	16.7	15.8	16.1	37.3	35.5	*	*	43.4	39.9	*	38.9	23.9
% WITH CAPABILITY	34.9	49.3	56.9	54.5	28.9	8.1	11.0	0.5	0.4	3.7	4.1	1.0	5.2	18.4
MASSACHUSETTS														
	ESTIMATED POPULATION	1158	1870	1748	873	187	346	32	14	233	183	48	166	540
	% STANDARD ERROR	20.1	15.2	15.9	15.7	21.3	32.0	*	*	39.1	38.9	*	40.5	24.7
% WITH CAPABILITY	32.5	52.5	49.1	49.7	24.5	5.2	9.7	0.9	0.4	6.5	5.1	1.3	4.7	15.2
MICHIGAN														
	ESTIMATED POPULATION	2549	4523	4143	2574	831	618	106	32	573	705	142	824	1403
	% STANDARD ERROR	12.8	9.8	10.0	10.7	21.1	26.1	41.7	*	21.4	19.7	49.5	19.7	14.5
% WITH CAPABILITY	31.4	55.6	51.0	44.2	31.7	10.2	7.6	1.3	0.4	7.1	8.7	1.8	10.1	17.3
MINNESOTA														
	ESTIMATED POPULATION	1999	2443	2356	1375	540	188	41	46	293	287	87	355	1600
	% STANDARD ERROR	14.4	12.9	13.3	13.0	16.9	34.9	*	*	31.2	31.4	*	31.5	14.4
% WITH CAPABILITY	34.1	41.7	40.2	41.6	23.5	9.2	3.2	0.7	0.8	5.0	4.9	1.5	6.1	27.3

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.					OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ	
MISSISSIPPI	675	1171	1179	936	712	250	126	6	4	145	188	19	275	881	
	26.8	19.7	19.6	21.2	23.5	34.9	*	*	*	47.2	40.9	*	33.9	21.0	
	27.6	47.9	48.3	38.3	29.2	10.2	5.2	0.2	0.1	5.9	7.7	0.8	11.3	38.1	
MISSOURI	1435	2633	2894	2678	1629	824	210	80	35	492	820	65	493	1018	
	18.0	13.0	12.6	13.0	16.2	22.0	41.7	*	*	28.5	23.6	*	26.9	17.5	
	28.5	52.2	57.4	53.1	32.3	16.3	4.2	1.6	0.7	9.8	12.3	1.3	9.8	20.2	
MONTANA	957	916	993	1245	675	171	184	10	0	79	118	14	77	889	
	21.4	21.7	20.3	18.5	25.1	49.0	48.5	*	0.0	*	*	*	*	24.1	
	37.5	35.9	38.9	48.8	26.4	6.7	7.2	0.4	0.0	3.1	4.6	0.6	3.0	27.0	
NEBRASKA	504	832	870	947	402	216	39	10	1	145	144	25	162	720	
	30.1	23.9	23.4	22.4	32.3	42.9	*	*	*	44.9	47.5	*	45.3	20.9	
	25.4	41.9	43.8	47.7	20.2	10.9	2.0	0.5	0.1	7.3	7.3	1.2	8.2	36.3	
NEVADA	626	891	1075	946	590	86	197	8	8	131	105	55	138	347	
	28.8	19.6	19.6	21.3	26.3	*	42.2	*	*	48.1	48.0	*	40.9	32.7	
	31.9	50.5	54.7	48.2	30.1	4.4	10.0	0.4	0.4	6.6	5.4	2.8	7.0	17.7	
NEW HAMPSHIRE	535	800	867	757	557	289	135	10	8	89	172	25	115	281	
	30.0	23.2	22.3	23.0	26.1	37.5	47.1	*	*	*	48.0	*	*	30.6	
	35.1	52.6	57.0	49.7	36.3	19.0	8.8	0.7	0.5	5.9	11.3	1.6	7.6	18.5	
NEW JERSEY	1353	2500	2712	2468	1581	514	92	100	123	347	519	77	340	727	
	18.3	12.7	12.3	13.0	15.8	26.8	*	44.5	35.9	25.0	23.7	*	25.1	21.2	
	31.4	58.0	62.9	57.3	36.7	11.9	2.1	2.3	2.9	8.0	12.1	1.8	7.9	18.9	
NEW MEXICO	1155	973	1295	1321	926	505	142	34	15	263	336	58	298	576	
	19.2	20.1	17.6	17.9	20.5	28.3	*	*	*	32.8	34.0	*	30.6	23.2	
	43.6	36.7	48.9	49.8	35.0	19.1	5.4	1.3	0.6	9.9	12.7	2.1	11.3	21.8	

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STATE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.			OTHER NAVIGATION EQUIPMENT					
	VOR 100CH	VOR 200CH	VOR 2+	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ
NEW YORK	2808	3365	4017	3607	2133	758	814	195	122	472	630	311	652	1642
	12.7	11.1	10.4	10.8	13.5	20.8	27.0	33.5	36.7	22.5	21.5	32.3	20.4	14.3
	37.2	44.6	53.3	47.9	28.3	10.1	8.1	2.6	1.6	6.3	8.4	4.1	8.7	21.8
NORTH CAROLINA	1453	2567	2849	2686	1882	692	269	92	8	695	643	87	717	599
	16.9	13.2	12.1	12.4	14.4	22.5	36.2	*	*	22.9	21.8	*	21.0	25.2
	31.7	56.1	62.2	56.7	41.1	15.1	5.9	2.0	0.2	15.2	14.0	1.9	15.7	13.1
NORTH DAKOTA	651	488	682	559	403	96	56	8	1	76	75	10	44	745
	26.8	30.3	25.9	28.0	32.9	*	*	*	*	*	*	*	*	23.2
	36.5	27.3	38.2	31.3	22.6	5.4	2.1	0.5	0.1	4.2	4.2	0.5	2.4	41.7
OHIO	2316	4992	4856	3927	2491	919	467	150	25	536	799	166	824	1809
	13.8	9.3	9.5	10.5	12.7	20.0	29.1	32.6	*	21.6	20.3	40.7	19.0	13.9
	26.7	57.6	56.0	45.3	28.7	10.6	5.4	1.7	0.3	8.2	9.2	1.9	9.5	20.9
OKLAHOMA	1863	3281	3532	3400	2215	1107	281	68	10	588	816	78	791	914
	15.8	11.5	11.3	11.4	14.0	19.4	38.9	40.7	*	23.4	21.4	*	22.5	19.6
	31.8	56.0	60.2	58.0	37.8	18.8	4.8	1.2	0.2	10.0	13.9	1.3	13.5	15.6
OREGON	2258	2493	2574	2705	1512	545	718	133	25	365	468	166	331	1199
	14.2	13.0	12.8	12.0	16.0	26.4	22.3	*	*	29.2	24.3	40.3	30.4	17.0
	39.3	43.4	44.8	47.1	26.3	9.5	12.5	2.3	0.4	6.4	8.1	2.9	5.8	20.9
PENNSYLVANIA	2095	3750	4024	3349	2505	1167	512	145	98	936	801	352	865	1578
	14.3	10.5	10.2	10.9	12.3	17.6	27.9	38.7	*	18.4	17.6	32.1	17.4	14.3
	26.7	51.4	55.1	45.9	34.3	16.0	7.0	2.0	1.3	12.8	12.4	4.8	11.9	21.6
RHODE ISLAND	187	207	220	202	133	55	82	3	0	51	44	1	50	50
	*	45.6	43.4	44.1	*	*	*	*	0.0	*	*	*	*	*
	45.0	49.6	52.8	48.5	31.8	13.2	19.6	0.7	0.0	12.3	10.6	0.3	12.0	11.9

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STATE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.			OTHER NAVIGATION EQUIPMENT					
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPT	WEATHER RADAR	NO NAVEQ
SOUTH CAROLINA	442	1128	1142	938	710	284	68	7	11	159	254	19	290	301
	33.7	19.4	19.4	20.9	23.4	34.3	*	*	*	38.0	34.4	*	31.6	30.8
	24.8	63.2	64.0	52.6	39.6	15.9	3.7	0.4	0.6	8.9	14.3	1.1	16.3	16.9
SOUTH DAKOTA	502	608	702	644	379	158	43	40	36	121	119	39	119	444
	29.6	28.1	25.9	26.8	34.4	49.6	*	*	*	*	*	*	*	27.4
	33.1	40.1	46.3	42.5	25.0	10.4	2.8	2.7	2.4	8.0	7.8	2.5	7.8	29.3
TENNESSEE	913	1811	1882	1816	1331	535	303	38	1	315	344	70	593	691
	22.0	15.5	15.1	15.2	17.4	26.9	33.7	*	*	28.4	31.0	*	23.5	24.2
	28.4	56.3	57.8	56.4	41.4	16.6	9.4	1.2	0.0	8.8	10.7	2.2	18.4	21.5
TEXAS	5482	12582	12997	13150	9847	4280	1383	737	203	2713	3685	554	3862	4543
	8.7	5.6	5.4	5.4	6.2	9.3	17.0	15.5	30.6	9.7	9.4	19.6	9.1	8.9
	24.9	57.1	59.0	59.7	43.8	19.4	6.3	3.3	0.9	12.3	16.6	2.5	16.6	20.6
UTAH	559	675	738	677	430	209	102	1	5	61	153	17	140	181
	29.0	24.3	24.0	25.1	30.3	42.8	*	*	*	*	44.2	*	48.1	48.9
	40.1	48.4	52.9	48.5	30.8	15.0	7.3	0.1	0.4	4.4	11.0	1.2	10.0	11.5
VERMONT	160	269	272	303	217	41	57	1	3	57	88	5	77	191
	48.7	37.1	37.0	34.6	38.7	*	*	*	*	*	*	*	*	44.0
	27.5	46.1	46.7	52.0	37.2	7.0	9.8	0.2	0.6	9.8	15.1	0.8	13.1	32.7
VIRGINIA	790	2047	1737	1674	1113	403	275	62	45	283	385	69	388	740
	23.2	14.6	15.2	15.7	18.6	29.0	41.3	*	*	33.7	28.9	45.8	27.4	23.5
	22.8	59.2	50.2	48.4	32.2	11.6	8.0	1.8	1.3	7.6	10.6	2.0	11.2	21.4
WASHINGTON	2620	3886	3792	3399	1800	428	733	11	38	370	442	28	167	1870
	13.0	10.5	10.7	11.1	15.7	29.2	24.2	*	*	32.7	30.7	*	40.5	14.0
	34.4	48.4	49.7	44.6	21.0	5.6	9.6	0.1	0.5	4.9	5.8	0.4	2.2	24.5

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STATE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.				OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ
WEST VIRGINIA	209	572	578	562	353	149	169	13	11	58	128	17	101	241
	44.1	26.4	26.4	28.7	32.4	45.9	*	*	*	*	*	*	*	38.4
	20.5	58.1	58.6	55.1	34.7	14.8	16.8	1.3	1.0	5.7	12.6	1.7	9.9	23.6
WISCONSIN	1779	2154	2412	2082	1143	478	173	107	41	493	304	48	341	1105
	15.9	14.0	13.5	14.1	18.4	27.3	45.7	47.3	*	27.0	29.8	*	27.4	17.7
	35.4	42.9	48.1	41.1	22.8	9.5	3.4	2.1	0.8	9.8	6.1	1.0	6.8	22.0
WYOMING	532	885	958	854	695	233	64	3	0	140	104	53	62	271
	29.6	22.1	21.6	22.4	25.9	40.2	*	*	0.0	41.8	*	*	*	38.4
	33.2	55.3	59.7	53.4	43.4	14.8	4.0	0.2	0.0	8.8	6.5	3.3	3.9	18.9
PUERTO RICO	285	228	280	315	126	17	0	1	0	21	21	3	61	20
	38.9	40.2	35.4	35.7	48.0	*	0.0	*	0.0	*	*	*	*	*
	62.9	50.3	61.9	69.6	27.7	3.9	0.0	0.3	0.0	4.7	4.6	0.7	13.4	4.4
OTHER U.S. TERRITORIES	17	63	68	77	29	11	0	0	0	13	5	0	11	7
	*	*	*	*	*	*	0.0	0.0	0.0	*	*	0.0	*	*
	19.2	72.6	78.5	89.0	33.0	12.5	0.0	0.0	0.0	15.5	5.4	0.0	12.2	8.2
FOREIGN	430	1010	1180	1321	1028	151	193	178	94	272	318	112	305	270
	31.0	18.4	17.3	16.6	18.5	45.3	44.0	35.3	45.1	25.1	25.7	29.5	22.6	40.2
	24.9	58.5	67.2	76.5	59.4	8.7	11.2	10.2	5.4	15.8	18.5	6.5	17.7	15.6
TOTAL	82552	137088	143436	135093	87913	31244	18906	3976	1903	21309	25097	5986	24859	58117
	1.8	1.0	0.7	0.8	1.3	2.7	4.3	5.9	11.0	2.7	2.5	6.7	2.2	1.4
	30.9	51.3	53.6	50.5	32.9	11.7	7.1	1.5	0.7	8.0	9.4	2.2	9.2	21.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.

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REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4098 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
ALASKAN												
	4799	3738	2829	651	3422	1080	5027	2904	2523	2234	168	5418
	8.2	9.5	10.6	24.0	9.7	18.1	7.9	10.1	11.2	11.7	39.1	7.8
	56.8	44.2	33.5	7.7	40.5	12.6	59.5	34.4	29.9	26.4	2.0	84.1
CENTRAL												
	5954	6841	7288	2975	9508	4062	5585	7898	7584	6808	8	8840
	8.5	7.9	7.7	10.4	6.7	10.0	8.0	7.4	7.5	7.9	*	7.3
	39.5	45.4	48.3	19.7	83.1	27.0	36.9	52.4	50.3	45.2	0.1	45.4
EASTERN												
	11584	12803	13917	4703	17732	9648	9744	15591	14081	12931	350	11370
	6.0	5.5	5.3	8.4	4.7	6.3	6.0	5.0	5.2	5.5	35.1	5.6
	42.2	48.6	50.7	17.1	64.5	35.1	35.5	56.7	51.2	47.1	1.3	41.4
EUROPEAN OFFICE												
	125	446	441	38	423	403	167	426	423	429	0	160
	*	30.1	30.9	*	30.9	31.3	*	30.8	30.9	30.6	0.0	*
	21.3	75.7	74.8	6.5	71.7	68.4	28.3	72.3	71.8	72.8	0.0	27.2
GREAT LAKES												
	18858	21337	22014	8544	26614	12365	18630	23447	21330	19068	287	20872
	4.6	4.3	4.2	6.0	3.8	5.5	4.2	4.0	4.2	4.5	37.4	4.0
	41.7	47.2	48.7	18.9	58.8	27.3	41.2	51.8	47.1	42.1	0.6	46.1
NEW ENGLAND												
	3945	4575	4509	1498	5804	3314	3613	5138	4646	4048	49	4030
	10.4	9.4	8.7	15.0	8.5	11.2	10.2	9.0	9.5	10.2	*	9.6
	41.9	48.6	47.9	15.9	61.6	35.2	38.4	54.6	49.3	43.0	0.5	42.8
NORTHWEST MOUNTAIN												
	11615	13155	12270	4165	16578	7716	10488	13075	12181	11405	170	13394
	5.9	5.5	5.7	9.2	4.9	7.1	5.9	5.5	5.7	5.9	*	5.3
	42.9	48.6	45.3	15.4	61.3	28.5	38.7	48.3	45.0	42.1	0.6	49.5
SOUTHERN												
	14955	19985	20535	5406	26116	13959	11770	22929	20944	19273	323	14477
	5.3	4.3	4.2	7.9	3.8	5.0	5.6	4.0	4.2	4.3	36.3	5.1
	39.5	52.8	54.2	14.3	68.9	36.8	31.1	60.5	55.3	50.9	0.9	38.2

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REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4088 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MARK BECH	GLIDE SLOPE	MLS	NO ILS
SOUTHWESTERN	14734	19802	20228	8588	25881	14217	12858	21743	20175	18902	312	18241
	5.3	4.3	4.3	7.0	3.7	5.0	5.2	4.1	4.2	4.3	38.7	4.8
	38.1	51.3	52.4	17.0	87.2	38.8	32.8	58.3	52.2	48.8	0.8	42.0
WESTERN-PACIFIC	17934	22485	22413	8339	31045	18084	13024	25220	22718	21158	328	18189
	4.8	4.1	4.0	7.1	3.4	4.8	4.8	3.8	4.0	4.2	38.9	4.3
	40.7	51.0	50.9	14.4	70.4	38.5	29.6	57.2	51.5	48.0	0.7	41.3
TOTAL	108908	131474	132424	43403	171173	86753	86252	145005	132834	121814	2085	117850
	1.4	1.1	0.9	1.9	0.8	1.4	1.1	0.8	0.8	1.0	14.0	1.0
	41.1	49.2	49.5	18.2	84.0	32.4	38.0	54.3	48.6	45.5	0.8	44.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.



TABLE 2 - 17

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
BASE REGION OF AIRCRAFT  
1984

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REGION	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.					OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ	
ALASKAN															
	3737	3498	2691	4381	1498	533	868	156	153	472	286	164	283	1302	
	% ESTIMATED POPULATION	9.6	9.6	11.0	8.3	13.7	19.6	41.0	41.5	23.8	29.6	39.6	29.7	16.3	
% STANDARD ERROR	44.2	41.4	31.9	51.9	17.7	8.3	10.2	1.8	1.8	5.6	3.4	1.9	3.4	15.4	
% WITH CAPABILITY															
CENTRAL															
	4508	7241	8000	7853	4774	1916	646	183	69	1190	1376	180	1361	3759	
	% ESTIMATED POPULATION	9.9	7.7	7.5	9.3	14.0	25.2	30.0	*	16.1	15.4	39.5	15.8	9.3	
% STANDARD ERROR	28.9	48.0	53.1	50.8	31.7	12.7	4.3	1.2	0.5	7.9	9.1	1.2	9.0	24.9	
% WITH CAPABILITY															
EASTERN															
	8580	14142	15283	13802	8897	3398	2083	563	445	2324	2810	908	2645	5822	
	% ESTIMATED POPULATION	7.1	5.3	5.0	5.3	8.4	14.2	18.5	20.2	10.6	9.8	18.4	9.6	7.5	
% STANDARD ERROR	31.2	51.5	55.6	50.2	32.4	12.4	7.6	2.0	1.6	8.5	10.2	3.3	9.6	20.5	
% WITH CAPABILITY															
EUROPEAN OFFICE															
	123	412	469	484	403	24	61	56	93	158	172	37	142	101	
	% ESTIMATED POPULATION	30.8	28.6	28.5	31.3	*	*	*	45.6	34.6	39.6	47.1	33.4	*	
% STANDARD ERROR	20.8	69.9	79.6	82.2	68.4	4.0	10.4	9.6	15.7	26.5	29.1	6.2	24.1	17.2	
% WITH CAPABILITY															
GREAT LAKES															
	14098	22618	23581	21178	13318	5068	2543	886	240	3308	3497	676	4110	10211	
	% ESTIMATED POPULATION	5.4	4.2	4.0	4.2	5.3	12.6	17.6	32.6	9.2	8.9	20.8	8.2	5.4	
% STANDARD ERROR	31.2	50.0	52.1	46.8	29.4	11.2	5.6	1.5	0.5	7.3	7.7	1.5	9.1	22.6	
% WITH CAPABILITY															
NEW ENGLAND															
	2914	4842	4741	4621	2478	807	797	53	58	643	715	127	666	1931	
	% ESTIMATED POPULATION	12.4	9.3	9.4	9.5	12.3	21.4	*	46.3	23.4	20.9	49.9	20.9	12.9	
% STANDARD ERROR	30.9	51.4	50.3	49.1	26.3	8.6	8.5	0.6	0.6	6.8	7.6	1.4	7.1	20.5	
% WITH CAPABILITY															
NORTHWEST MOUNTAIN															
	9416	12785	13301	13012	7878	2433	2109	237	111	1650	1774	560	1206	5898	
	% ESTIMATED POPULATION	6.7	5.6	5.5	5.5	7.1	13.6	33.0	*	14.0	13.4	23.6	15.2	7.5	
% STANDARD ERROR	34.6	47.2	49.1	48.1	29.1	9.0	7.8	0.9	0.4	6.1	6.6	2.1	4.5	21.8	
% WITH CAPABILITY															
SOUTHERN															
	11380	21495	22798	21304	14572	4957	3344	381	140	3942	4393	857	5262	6839	
	% ESTIMATED POPULATION	6.1	4.2	4.0	4.1	4.8	10.6	22.0	46.7	8.2	7.9	18.6	7.0	7.0	
% STANDARD ERROR	30.0	56.7	60.2	56.2	38.5	13.1	8.8	1.0	0.4	10.4	11.6	2.3	13.9	18.1	
% WITH CAPABILITY															

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 17

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
BASE REGION OF AIRCRAFT  
1984

PAGE 4 OF 4

REGION	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.			OTHER NAVIGATION EQUIPMENT					
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTR	WEATHER RADAR	NO NAVEQ
SOUTHWESTERN	10550	20809	21778	22235	15851	8956	2830	1020	235	4308	5898	917	5730	7999
	8.3	4.2	4.1	4.0	4.7	7.1	11.2	13.3	28.8	7.6	7.4	15.6	7.1	8.2
	27.3	53.9	58.4	57.5	40.5	18.0	7.3	2.6	0.6	11.2	14.7	2.4	14.8	20.7
WESTERN-PACIFIC	13103	23285	23982	19998	14708	3553	2437	527	248	2855	3287	1283	2434	8771
	5.5	4.0	3.9	4.3	5.0	9.8	13.3	24.4	33.0	10.3	9.5	16.7	10.5	5.8
	29.7	52.9	54.4	45.4	33.4	8.1	5.5	1.2	0.6	8.0	7.4	2.9	5.5	19.9
TOTAL	82552	137088	143436	135093	87913	31244	18906	3978	1903	21309	25097	5968	24859	58117
	1.8	1.0	0.7	0.8	1.3	2.7	4.3	5.9	11.0	2.7	2.5	6.7	2.2	1.4
	30.9	51.3	53.6	50.5	32.9	11.7	7.1	1.5	0.7	8.0	9.4	2.2	9.2	21.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
PRIMARY USE  
1984

PAGE 1 OF 4

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	ND VHF	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MMWR BECH	GLIDE SLOPE	MLS	NO ILS
EXECUTIVE												
ESTIMATED POPULATION	3103	14859	14258	215	16123	14192	550	15570	15344	15170	312	1045
% STANDARD ERROR	9.9	3.6	3.8	39.4	3.5	3.7	22.7	3.5	3.5	3.5	26.9	16.2
% WITH CAPABILITY	18.6	89.1	85.5	1.3	96.7	85.1	3.3	93.4	92.0	91.0	1.9	6.3
BUSINESS												
ESTIMATED POPULATION	17215	33421	36659	582	43131	29875	4031	39917	39461	36737	485	6329
% STANDARD ERROR	4.6	3.0	2.8	24.8	2.5	3.1	9.3	2.6	2.7	2.8	29.7	7.5
% WITH CAPABILITY	36.5	70.9	77.7	1.2	91.5	63.3	8.5	84.6	83.7	77.9	1.0	13.4
PERSONAL												
ESTIMATED POPULATION	56452	45497	50196	11880	66063	21643	39578	52769	46915	40722	812	50180
% STANDARD ERROR	2.2	2.7	2.4	4.3	2.0	4.1	2.2	2.3	2.5	2.8	24.4	2.0
% WITH CAPABILITY	53.4	43.1	47.5	11.2	62.5	20.5	37.5	50.0	44.4	38.5	0.8	47.5
INSTRUCTIONAL												
ESTIMATED POPULATION	6729	6693	5591	788	11473	2735	3835	8099	5461	5030	166	7126
% STANDARD ERROR	8.3	7.1	9.4	19.2	6.1	13.3	10.6	7.5	9.4	9.7	46.3	7.7
% WITH CAPABILITY	44.0	56.8	36.5	5.1	74.9	17.9	25.1	52.9	35.7	32.9	1.1	46.5
AERIAL APPLICATION												
ESTIMATED POPULATION	684	1109	687	5651	691	255	6696	519	448	445	40	6863
% STANDARD ERROR	21.5	16.1	21.4	3.9	20.8	37.0	3.2	23.0	23.5	23.5	*	3.2
% WITH CAPABILITY	9.3	15.0	9.3	76.5	9.3	3.5	90.7	7.0	6.1	6.0	0.5	92.9
AERIAL OBSERVATION												
ESTIMATED POPULATION	2317	2700	2522	315	3297	1592	1854	2697	2070	1884	16	2435
% STANDARD ERROR	13.5	12.2	12.9	34.9	11.0	15.8	14.7	12.3	14.3	15.1	*	12.7
% WITH CAPABILITY	45.0	52.4	49.0	6.1	64.0	30.9	36.0	52.4	40.2	36.6	0.3	47.3
OTHER WORK USE												
ESTIMATED POPULATION	567	505	287	289	536	144	806	266	252	179	1	1036
% STANDARD ERROR	25.0	22.5	34.2	30.6	25.4	34.6	18.2	34.4	38.3	47.0	*	16.7
% WITH CAPABILITY	42.2	37.6	21.4	21.5	40.0	10.7	60.0	21.3	16.8	13.3	0.1	77.2
COMMUTER AIR CARRIER												
ESTIMATED POPULATION	366	1002	991	0	1207	816	30	1195	1138	1182	3	42
% STANDARD ERROR	25.5	13.3	13.0	0.0	12.4	14.0	*	12.3	12.3	12.4	*	*
% WITH CAPABILITY	31.2	61.1	60.2	0.0	97.6	66.0	2.4	96.6	92.1	95.7	0.2	3.4

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
PRIMARY USE  
1984

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PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO VHF	4098 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR BECN	GLIDE SLOPE	MLS	NO ILS
AIR TAXI												
ESTIMATED POPULATION	1901	5889	4745	89	8471	4513	735	5557	5360	5200	35	1813
% STANDARD ERROR	14.0	7.4	8.5	*	7.1	8.7	19.0	7.8	7.9	8.0	*	12.3
% WITH CAPABILITY	28.4	81.4	85.8	1.0	89.8	82.6	10.2	77.1	74.4	72.2	0.5	22.4
OTHER												
ESTIMATED POPULATION	1424	2569	1837	803	2608	1845	2124	1885	1710	1888	8	2825
% STANDARD ERROR	16.1	10.8	12.7	20.1	10.6	13.1	12.8	12.6	13.4	13.4	*	10.8
% WITH CAPABILITY	30.1	54.3	38.8	17.0	55.1	39.0	44.9	39.8	36.1	35.7	0.2	59.7
RENTAL												
ESTIMATED POPULATION	2740	8102	5584	697	8044	4541	1115	6789	6178	5929	15	2200
% STANDARD ERROR	12.9	8.8	9.1	23.6	7.6	10.1	17.9	8.3	8.6	8.7	*	13.9
% WITH CAPABILITY	29.9	66.6	60.8	7.6	87.8	49.6	12.2	74.1	67.5	64.7	0.2	24.0
INACTIVE												
ESTIMATED POPULATION	15719	7184	7842	24222	9872	3208	36364	8833	7237	6549	185	36800
% STANDARD ERROR	3.9	7.0	5.8	2.4	4.7	9.6	1.3	5.0	5.8	6.1	*	1.2
% WITH CAPABILITY	34.0	15.5	18.5	52.4	21.4	6.9	78.6	19.1	15.7	14.2	0.4	79.6
TOTAL												
ESTIMATED POPULATION	109908	131474	132424	43403	171173	88753	98252	145095	132634	121614	2085	117650
% STANDARD ERROR	1.4	1.1	0.9	1.9	0.6	1.4	1.1	0.8	0.8	1.0	14.0	1.0
% WITH CAPABILITY	41.1	49.2	49.5	16.2	64.0	32.4	36.0	54.3	49.6	45.5	0.8	44.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
PRIMARY USE  
1984

PAGE 3 OF 4

PRIMARY USE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.					OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLTMGT COMPTN	WEATHER RADAR	NO NAVEQ	
EXECUTIVE	ESTIMATED POPULATION	228C	14502	15525	14884	8939	1724	2607	886	9435	10277	2057	10929	294	
	% STANDARD ERROR	12.0	3.6	3.5	3.4	4.5	12.3	6.2	12.7	3.6	3.6	10.3	3.5	34.1	
	% WITH CAPABILITY	13.6	87.0	93.1	95.5	53.6	10.3	15.6	5.2	58.8	61.6	12.3	65.6	1.8	
BUSINESS	ESTIMATED POPULATION	13345	35168	40575	40514	12204	5931	257	135	5278	8112	1942	7293	831	
	% STANDARD ERROR	5.4	2.9	2.6	2.8	5.3	8.0	30.4	49.4	7.4	6.3	12.9	6.5	18.0	
	% WITH CAPABILITY	28.3	74.6	88.0	85.9	25.9	12.6	0.5	0.3	11.2	17.2	4.1	15.5	1.8	
PERSONAL	ESTIMATED POPULATION	42314	50959	54438	48293	4183	6749	259	298	2058	2079	787	1248	17581	
	% STANDARD ERROR	2.7	2.5	2.2	2.6	9.9	7.8	39.6	39.1	13.7	13.5	24.1	15.9	3.2	
	% WITH CAPABILITY	40.1	48.2	51.5	43.8	4.0	6.4	0.2	0.3	1.9	2.0	0.7	1.2	16.6	
INSTRUCTIONAL	ESTIMATED POPULATION	5838	8462	5897	5944	813	624	109	111	243	355	111	129	1515	
	% STANDARD ERROR	9.0	7.3	9.1	9.0	24.1	24.0	43.9	43.4	34.4	28.9	43.4	40.2	14.4	
	% WITH CAPABILITY	38.1	55.3	38.5	38.8	4.0	4.1	0.7	0.7	1.6	2.3	0.7	0.8	9.9	
AERIAL APPLICATION	ESTIMATED POPULATION	297	518	447	539	179	234	150	38	78	40	39	42	8481	
	% STANDARD ERROR	32.0	23.2	23.5	25.6	43.0	39.3	48.6	*	*	*	*	*	2.8	
	% WITH CAPABILITY	4.0	7.0	6.1	7.3	2.4	1.0	3.2	0.5	1.0	0.5	0.5	0.6	87.7	
AERIAL OBSERVATION	ESTIMATED POPULATION	1990	2220	2301	2568	322	563	18	63	224	78	52	50	958	
	% STANDARD ERROR	15.3	13.6	13.8	12.5	30.8	24.5	*	*	37.7	*	*	46.0	18.0	
	% WITH CAPABILITY	38.6	43.1	44.7	49.9	6.2	10.9	0.3	1.2	4.4	1.5	1.0	1.0	18.6	
OTHER WORK USE	ESTIMATED POPULATION	368	284	209	357	104	7	3	30	79	47	6	49	604	
	% STANDARD ERROR	32.3	31.6	41.0	28.5	43.4	*	*	*	49.3	*	*	*	21.5	
	% WITH CAPABILITY	27.3	21.1	15.6	28.6	7.7	4.0	0.5	0.2	5.9	3.5	0.4	3.6	45.0	
COMMUTER AIR CARRIER	ESTIMATED POPULATION	329	1072	1158	1133	275	8	28	0	323	348	143	692	4	
	% STANDARD ERROR	26.9	13.3	12.6	12.7	31.2	*	0.0	0.0	23.0	25.2	34.5	16.4	*	
	% WITH CAPABILITY	26.6	86.7	93.7	91.6	22.2	0.6	2.3	0.0	26.1	28.2	11.6	55.9	0.4	

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT  
BY  
PRIMARY USE  
1984

PAGE 4 OF 4

PRIMARY USE	VOR NAVIGATION EQUIPMENT					LONG RANGE NAV. EQUIP.				OTHER NAVIGATION EQUIPMENT				
	VOR 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHER LRNAV	RADAR ALTIM	FLIGHT DIRECT	FLYMG COMPT	WEATHER RADAR	NO NAVEQ
AIR TAXI														
ESTIMATED POPULATION	1342	5387	5417	5982	4655	1981	1081	155	33	1496	1560	416	2076	275
% STANDARD ERROR	15.1	8.0	7.9	7.4	8.4	13.1	18.0	39.6	*	13.6	12.5	25.9	10.9	23.6
% WITH CAPABILITY	18.6	74.7	75.2	83.0	64.6	27.5	15.0	2.1	0.5	20.8	21.6	5.8	28.8	3.8
OTHER														
ESTIMATED POPULATION	654	2180	1523	1694	1676	639	502	199	225	749	6.2	82	497	1833
% STANDARD ERROR	23.1	12.0	13.5	13.4	13.3	22.3	25.7	35.0	28.6	18.0	16.1	40.8	18.6	13.3
% WITH CAPABILITY	13.8	46.1	33.5	35.8	35.4	13.5	10.8	4.2	4.7	15.8	14.2	1.7	10.5	38.7
RENTAL														
ESTIMATED POPULATION	2615	6162	6368	5853	3436	850	468	1	0	257	508	20	459	656
% STANDARD ERROR	13.6	8.7	8.5	8.8	11.2	23.3	31.1	*	0.0	37.7	28.2	*	28.4	19.0
% WITH CAPABILITY	28.5	67.3	69.5	63.9	37.5	9.3	5.1	0.0	0.0	2.8	5.5	0.2	5.0	7.2
INACTIVE														
ESTIMATED POPULATION	10586	8650	8800	7235	4075	852	536	211	115	908	780	230	1054	26832
% STANDARD ERROR	5.2	5.9	5.1	5.9	7.9	19.9	27.3	22.7	*	11.0	14.5	27.8	11.6	2.0
% WITH CAPABILITY	22.9	18.7	18.6	15.6	8.8	1.4	1.2	0.5	0.2	2.0	1.7	0.5	2.3	58.0
TOTAL														
ESTIMATED POPULATION	82552	137088	143436	135093	87913	31244	18906	3976	1903	21309	25097	5966	24659	56117
% STANDARD ERROR	1.8	1.0	0.7	0.8	1.3	2.7	4.3	5.9	11.0	2.7	2.5	6.7	2.2	1.4
% WITH CAPABILITY	30.9	51.3	53.6	50.5	32.9	11.7	7.1	1.5	0.7	8.0	9.4	2.2	9.2	21.0

\* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS  
DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS  
BY  
AIRCRAFT MANUFACTURER/MODEL GROUP  
1984

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
OTHER 1	4883.6	552.0	11.3
OTHER 2	2339.1	288.4	11.5
OTHER 3	430.2	158.1	36.7
OTHER 4	623.1	678.1	108.8
OTHER 5	2384.1	540.1	22.7
OTHER 6	568.8	159.1	28.1
OTHER 7	499.5	354.9	71.0
OTHER 8	76.0	79.9	105.1
OTHER 9	1132.4	367.6	32.5
OTHER 10	1122.9	573.4	51.1
OTHER 11	588.3	248.2	42.2
OTHER 12	1729.3	1261.0	72.9
OTHER 13	543.5	124.1	22.8
ADAMS A50S	14.4	2.3	16.1
AERORSJ2	10.6	2.1	20.1
AEROSPSA318	1098.7	310.2	28.2
AJUSTA A109	14.6	14.5	99.7
AIRASPACE 18	3.5	1.4	39.0
AIRPTSA	595.6	71.6	12.0
AIRTRCAT300	805.4	108.2	13.4
AIRTRCAT400	56.9	8.5	15.0

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
BY  
AIRCRAFT MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
AMD FALC10	400.5	52.4	13.1
AMD FALC20	1287.6	113.0	8.9
AMD FALC50	109.4	9.9	9.1
ARCTICS1A	809.4	221.3	38.3
ARCTICS1B1	27.5	7.1	25.8
ARONCA15	373.2	45.2	12.1
ARONCA58	295.9	33.6	11.4
ARONCA85	447.6	105.6	23.6
ARONCAC3	82.9	11.4	18.1
AVIANNFALCON	2.9	0.9	30.7
AVIANNSKYTHK	5.0	1.2	24.8
AYRES S2	3073.2	422.4	13.7
BAC 111	307.5	50.2	16.3
BAG B208	79.9	7.9	9.9
BAG DH125	160.0	15.5	11.6
BALWKSFIREFY	209.6	41.7	19.9
BBAVIA11	1419.8	177.2	12.5
BBAVIA7	14857.8	4938.6	33.2
BBAVIA8	185.3	29.8	16.1
BEECH 100	908.5	129.7	14.3
BEECH 17	331.9	67.7	20.4



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## GENERAL AVIATION LIFETIME AIRFRAME HOURS

BY

AIRCRAFT MANUFACTURER/MODEL GROUP

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
BEECH 18	7437.8	2384.6	32.1
BEECH 200	1523.9	157.4	10.3
BEECH 23	5529.9	320.8	5.8
BEECH 300	2.2	0.6	25.9
BEECH 33	4478.6	314.9	7.0
BEECH 35	21289.2	1663.1	7.8
BEECH 36	3286.9	494.9	15.1
BEECH 45	1567.7	109.7	7.0
BEECH 50	1502.0	176.2	11.7
BEECH 55	5356.5	380.2	7.1
BEECH 56	154.1	10.3	6.7
BEECH 58	2149.7	279.1	13.0
BEECH 60	634.5	105.0	16.5
BEECH 65	729.1	118.5	16.2
BEECH 76	341.2	210.3	61.7
BEECH 77	291.3	27.8	9.5
BEECH 80	751.0	149.1	19.8
BEECH 90	3944.8	469.6	11.9
BEECH 95	1447.0	178.7	12.3
BEECH 99	1437.5	268.1	18.6
BELL 47	8933.1	1425.6	16.0

GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
BELL 204	220.1	77.8	35.4
BELL 205	118.4	22.4	19.0
BELL 206	678.0	934.2	13.8
BELL 212	912.9	278.4	30.5
BELL 222	59.9	11.2	18.7
BELL 412	76.0	11.9	15.6
BLANCA11	127.3	18.9	13.3
BLANCA1413	351.6	40.5	11.5
BLANCA1419	582.0	55.5	9.5
BLANCA17	1539.3	202.9	13.2
BLANCA7	3845.9	522.0	13.6
BLANCA8	316.6	27.8	8.8
BNORM BN2	798.7	66.1	8.3
BOEING707	2831.7	272.7	9.6
BOEING720	7.7	0.0	0.0
BOEING727	2008.0	807.1	45.2
BOEING737	83.9	0.0	0.0
BOEING75	7314.5	727.1	9.9
BOLKMS117	5.8	2.2	38.0
BRANTLY B2	208.5	25.4	12.2
BRASOVIS28	37.4	14.0	37.5

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
BY  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
BRWSTRFLEET2	78.1	7.2	9.3
BRWSTRFLEET7	104.1	14.5	13.9
BUKER 131	33.4	4.3	12.8
CAMPROMODELO	22.4	3.8	16.9
CESSNA120	2294.0	287.8	12.5
CESSNA140	6426.4	449.9	7.0
CESSNA150	53851.3	2406.7	4.5
CESSNA170	7841.4	576.4	7.5
CESSNA172	53575.4	1996.7	3.7
CESSNA175	2956.0	213.1	7.2
CESSNA177	4904.3	236.6	4.8
CESSNA180	7304.8	331.2	4.5
CESSNA182	27417.3	1173.2	4.3
CESSNA185	2836.1	163.9	5.8
CESSNA188	3343.1	212.3	6.4
CESSNA190	183.0	17.9	9.8
CESSNA195	1672.8	133.8	8.0
CESSNA205	611.1	70.8	11.6
CESSNA206	5615.1	510.9	9.1
CESSNA207	1355.6	158.5	11.7
CESSNA210	9319.3	713.4	7.7

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## GENERAL AVIATION LIFETIME AIRFRAME HOURS

BY  
AIRCRAFT MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
CESSNA303	83.0	14.6	17.6
CESSNA305	1204.2	178.9	14.9
CESSNA310	10834.5	529.0	5.0
CESSNA320	1132.5	77.4	6.8
CESSNA335	48.3	13.0	28.1
CESSNA338	140.3	32.0	22.8
CESSNA337	2539.2	237.8	9.4
CESSNA340	1442.4	203.0	14.1
CESSNA401	833.8	110.5	13.3
CESSNA402	2387.1	539.1	22.8
CESSNA404	538.6	180.9	30.0
CESSNA411	811.8	73.3	12.0
CESSNA414	1848.0	188.5	11.5
CESSNA421	2721.9	283.9	10.4
CESSNA425	130.1	20.2	15.5
CESSNA441	349.4	45.1	12.9
CESSNA500	1408.7	154.8	11.0
CESSNA501	65.6	11.4	17.3
CESSNA650	18.8	3.5	18.7
CESSNA750	242.0	70.8	29.3
CESSNAJC94	88.9	9.7	10.9

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## GENERAL AVIATION LIFETIME AIRFRAME HOURS

BY  
AIRCRAFT MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
CHILD S1	25.2	3.9	15.4
CHILD S2	93.0	14.6	15.7
CNDALRCL800	59.5	7.7	12.9
COMWTH185	236.2	203.9	86.3
CONAERLA4	349.8	62.2	17.8
CURTISC46	890.0	0.0	0.0
CURTISJR	25.2	6.1	24.3
CURTISROBIN	73.8	19.1	25.9
CURTISTRVAIR	293.1	94.6	32.3
CVAC 22	1330.0	0.0	0.0
CVAC 240	444.7	217.9	49.0
CVAC 440	229.5	0.0	0.0
CVAC BT13	186.3	58.4	31.3
CVAC L13	32.9	14.1	42.9
CVAC STC580	637.8	110.9	17.4
DART G	23.4	1.4	6.0
DHAV DHC1	368.5	41.6	11.3
DHAV DHC2	2217.4	361.8	16.3
DHAV DHC3	120.7	22.6	18.7
DHAV DHC8	1091.3	190.9	17.5
DHAVXXDH82	269.1	34.4	12.8

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
BY  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
DOUG A26	96.2	20.7	21.5
DOUG DC10	319.8	0.0	0.0
DOUG DC3	12875.1	3233.3	25.5
DOUG DC4	1148.3	166.0	14.5
DOUG DC8	3273.3	446.6	13.6
DOUG DC7	542.7	161.6	29.8
DOUG DC8	3863.6	0.0	0.0
DOUG DC9	895.1	341.1	38.1
EAGLE DW	47.4	11.4	24.0
EAGLEBC7	6.8	1.0	15.0
EIRVON20	53.2	14.0	26.3
EMAIR MA1	72.5	23.8	32.8
EMB 110	256.7	87.5	34.1
ENSTRM280	149.3	30.8	20.6
ENSTRMF28	493.5	149.1	30.2
FLEET 168	24.5	5.6	22.9
FRCHLD24	493.6	49.8	10.1
FRCHLDC119	264.6	0.0	0.0
FRCHLDF27	393.7	37.4	9.5
FRCHLDFH1100	158.9	43.5	27.4
FRCHLDM62	579.9	98.5	17.0

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
GENBALAX6	18.8	4.9	29.4
GLASFL201	31.0	4.8	15.6
GLASFLH301	148.6	21.2	14.2
GROB 103CAT	17.6	3.5	19.9
GROB 109	8.6	1.0	11.9
GROB ASTIR	32.1	8.9	21.7
GRTLKS2T1	91.6	19.7	21.5
GRUMAVAA1	932.9	55.0	5.9
GRUMAVAA5	1485.6	193.0	13.0
GRUMAVG1159	144.7	35.4	24.5
GRUMAVG184	3977.7	328.3	8.3
GRUMAVG21	425.7	34.2	8.0
GRUMAVT8M	88.2	12.7	18.6
GULSTM112	561.7	63.2	11.2
GULSTM500	1872.9	261.7	14.0
GULSTM520	292.2	44.7	15.3
GULSTM580	657.8	108.0	16.4
GULSTM680	888.6	542.2	78.7
GULSTM680TP	639.8	112.0	17.5
GULSTM690TC	23.9	2.6	10.8
GULSTM690TP	860.1	129.0	15.0

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
GULSTMAA1	961.2	78.7	8.2
GULSTMAA5	988.7	107.4	10.9
GULSTMG1159	729.2	151.7	20.8
GULSTMG159	1876.6	150.0	8.9
GULSTMG44	250.2	78.1	31.2
GULSTMG73	310.8	35.7	11.5
GULSTMG7	56.8	9.2	16.2
H-1	582.2	93.1	16.0
H13/CITL	217.6	41.2	18.9
H19/45	295.2	28.2	9.6
H23/HTE	1109.3	263.4	23.7
H34/55	279.2	22.2	7.9
HELIO H295	210.5	41.7	19.8
HELIO H391	50.8	15.2	30.0
HELIO H395	77.5	15.6	20.1
HILLERJ12	2475.9	576.6	23.3
HUGHES269	1754.3	437.4	24.9
HUGHES369	2070.4	262.8	12.7
HMKSLEYDH104	189.0	77.1	40.8
HMKSLEYDH125	594.4	133.2	22.4
INTRCP200	38.1	7.9	20.7



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## GENERAL AVIATION LIFETIME AIRFRAME HOURS

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
ISRAEL 1121	479.4	63.0	13.1
ISRAEL 1123	87.4	8.7	9.9
ISRAEL 1124	203.9	58.9	27.9
JBWSTRDGA15	123.5	32.2	26.1
LAIKFN10	15.3	3.1	20.5
LEAR 23	407.2	64.4	15.8
LEAR 24	799.5	100.7	12.6
LEAR 25	568.4	166.0	29.2
LEAR 35	1162.5	223.2	19.2
LEAR 55	55.7	6.2	11.1
LET L13	169.0	26.2	15.5
LKHEED1011	496.7	0.0	0.0
LKHEED12A	188.7	7.8	4.1
LKHEED1329	679.9	81.2	9.0
LKHEED18	723.2	118.2	16.3
LKHEEDPV1	33.5	4.1	12.1
LUSCOM8	6292.6	671.3	10.7
MARTIN404	324.0	415.0	128.1
MAULE M4	264.6	26.1	9.9
MAULE M5	233.6	31.3	13.4
MAULE M8	19.1	1.8	9.7

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
MBB BO105	249.3	143.6	57.6
MCLISHFUNK8	211.1	48.7	23.1
MEYERSOTV	132.1	14.3	10.9
MNCOUP90	108.3	24.9	23.0
MNMITEM18	188.6	20.2	12.0
MODFD47	259.0	50.0	19.3
MODFDUH12	74.9	17.7	23.6
MOONEYM20	12286.3	622.7	5.1
MROCHTIS205	37.2	2.6	7.0
MTSBSIMJ2	1135.2	149.6	13.2
MTSBSIMJ300	30.9	9.7	31.5
MULTECD16	92.2	10.9	11.8
NAMER B25	309.9	39.4	12.7
NAMER F51	155.6	76.6	49.2
NAMER NA260	156.6	14.1	9.0
NAMER T6	2505.5	337.9	13.5
NATBAL752	1.2	0.1	10.7
NAVAL N3N	450.2	77.3	17.2
NAVIONNAVION	1829.4	114.8	6.3
NORD SV4	126.0	0.0	0.0
NORWST65	145.9	26.9	18.4

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
OTHEXWILPIST	93.2	0.0	0.0
PARTENP88	21.2	8.9	41.9
PICARDAX6	33.5	2.2	6.4
PILATS84	13.9	2.0	14.4
PIPER 600	325.3	39.5	12.1
PIPER E2	26.2	5.0	19.1
PIPER J2	41.3	7.9	19.1
PIPER J3	11505.2	768.8	6.7
PIPER J4	395.4	59.1	14.9
PIPER J5	973.9	109.4	11.2
PIPER PA12	3502.8	303.8	8.7
PIPER PA14	289.6	36.8	12.7
PIPER PA15	279.5	26.2	9.4
PIPER PA16	821.0	60.9	7.4
PIPER PA17	230.7	19.8	8.6
PIPER PA18	10388.9	2586.2	24.9
PIPER PA20	901.3	150.4	16.7
PIPER PA22	12051.4	715.9	5.9
PIPER PA23	11640.8	761.9	6.5
PIPER PA24	9407.1	482.3	5.1
PIPER PA25	4015.6	394.5	9.8

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## GENERAL AVIATION LIFETIME AIRFRAME HOURS

BY  
AIRCRAFT MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
PIPER PA28	51340.6	2113.1	4.1
PIPER PA30	3815.3	218.8	5.7
PIPER PA31	5858.9	488.0	8.3
PIPER PA31T	1091.0	142.3	13.0
PIPER PA32	8006.0	599.8	7.5
PIPER PA34	3838.0	542.1	14.1
PIPER PA38	601.1	60.6	10.1
PIPER PA38	2633.9	174.8	6.6
PIPER PA42	73.2	14.6	19.9
PIPER PA44	326.4	24.1	7.4
PIPER PA46	12.4	1.4	11.2
PRATT PRG1	8.9	1.8	23.8
PH10PJT200	107.7	8.9	8.4
RAVEN RX8	36.4	5.4	14.8
RAVEN S50	23.8	3.9	16.4
RAVEN S55	135.9	6.7	4.9
RAVEN S60	15.9	4.4	27.4
RAVEN S66	6.9	1.5	21.8
RKVLL500	96.0	15.1	15.7
RKVLL700	31.9	7.9	24.8
RKVLLNA265	1271.3	161.1	12.7

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
ROBSINR22	219.1	53.6	24.5
ROLSCHLS	45.1	8.7	19.2
RYAN ST3	360.2	52.7	14.6
RYAN STA	20.3	9.8	48.0
SCHLERASW15	30.9	2.2	7.0
SCHLERASW19	42.6	10.4	24.4
SCHLERASW20	52.4	13.9	26.5
SCHLERK8	28.5	3.3	11.5
SCHLERKA8	68.2	8.6	12.6
SCHZERG184	1212.4	72.1	5.9
SCHZERSG1	584.5	82.1	14.0
SCHZERSG2	1197.2	216.7	18.1
SEWCO CLINGER	3.7	0.9	24.1
SEWCO MODEL T	5.3	0.6	10.9
SKRSKYS55	178.5	38.8	21.8
SKRSKYS58	127.3	88.9	68.3
SKRSKYS78	131.6	66.2	50.3
SLINDS100	478.2	49.0	10.3
SMITH 800	687.7	31.2	4.5
SNIAS AS350	184.8	44.8	27.2
SNIAS AS355	244.7	29.2	11.9

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
SNIAS SA318	153.5	8.2	5.4
SNIAS SA341	81.5	12.9	15.8
SOCATAMS884	29.8	3.1	10.5
SOCATARALLYE	14.9	5.0	33.3
SPRTHCIRRUS	95.3	10.3	10.8
SPRTHNINBUS	40.1	7.2	18.0
SPRTHVENTUS	11.8	1.2	10.4
STBROSSD3	321.0	5.9	1.8
STNSON10	381.9	51.2	14.1
STNSONL5	396.9	80.6	20.3
STNSONSR9	79.8	5.4	6.7
STNSONV77	80.4	17.5	21.8
STOLAMRC3	253.0	84.9	33.6
SUPAC LA	105.0	15.4	14.7
SUPAC V	24.5	1.9	7.6
SVRNGNSA228	784.2	118.5	15.1
SVRNGNSA227	67.4	12.4	18.4
SVRNGNSA26	535.9	39.0	7.3
TCRAFK21	2.5	0.7	28.1
TCRAFKD	379.9	88.6	17.5
TCRAFTA	32.9	3.0	9.2

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GENERAL AVIATION LIFETIME AIRFRAME HOURS  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
TCRAFTBC	3085.1	338.7	11.0
TCRAFTBF	84.7	7.2	8.4
TCRAFTBL	477.9	108.8	22.3
TEMCO 11A	48.7	4.7	10.1
TW55	148.5	1.4	0.9
THUNDERAX7	4.0	1.4	34.2
TWPSONNAVION	1741.7	172.2	9.9
TOMCAT	103.8	23.4	22.5
TRYTEK65	554.6	91.7	16.5
TRYTEK	50.0	7.8	15.8
UNIVACGC1	1127.4	73.4	6.5
UNIVAR108	4388.3	514.1	11.8
UNIVAR415	4079.6	194.5	4.8
VARGA 2150	143.7	34.3	23.9
VICKER745	347.3	0.0	0.0
WACO ASO	95.2	14.1	14.8
WACO GXE	25.1	3.7	14.7
WACO R	55.3	2.6	4.7
WACO U	29.5	4.5	15.3
WACO UPF7	888.8	99.5	14.2
WACO YK	107.4	8.2	7.7

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## GENERAL AVIATION LIFETIME AIRFRAME HOURS

BY

AIRCRAFT MANUFACTURER/MODEL GROUP  
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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
VSK M18	10.8	2.2	20.0
VTHRLY201	134.0	10.1	7.6
TOTAL AIRCRAFT	635492.2	9228.4	1.5



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GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES  
BY ENGINE MANUFACTURER/MODEL GROUP  
1984

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ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
ALLSN 250C	2039	4.60	88.23	515	8.69
ALLSN 501D	110	5.81	98.55	585	15.98
AMTRMCKCJLH	100	54.45	22.52	29	40.83
ARSCHTFE731	452	0.00	100.00	395	5.35
ARSCHTPE331	524	7.00	80.20	325	8.47
CONT 8285	138	5.97	91.01	217	16.85
CONT 975	28	0.00	100.00	385	24.28
CONT A40	33	26.60	25.15	21	29.05
CONT A85	5201	4.97	53.28	54	8.77
CONT A75	1215	9.31	57.44	43	10.09
CONT A80	4	273.83	4.88	38	21.13
CONT C125	208	19.19	52.88	55	15.39
CONT C145	1744	7.39	78.95	60	11.71
CONT C85	3453	6.12	55.80	51	9.84
CONT C90	1972	5.96	78.63	49	13.21
CONT E185	1723	8.07	83.03	70	15.68
CONT E225	1011	11.51	67.18	77	20.44
CONT 0200	13059	2.58	88.12	125	9.28
CONT 0300	9017	2.51	89.18	81	9.49
CONT 0348	298	5.98	93.91	59	18.64
CONT 0380	3348	3.73	90.82	148	10.14
CONT 0470	24277	1.29	89.23	122	4.00
CONT 0520	29308	0.64	96.70	207	2.71
CONT R670	521	15.61	49.01	60	15.59
DHAVXXGIPSY	69	14.81	85.42	40	12.84
FCD 6440	179	18.09	51.88	38	24.79
FRKLN4AC150	25	0.00	100.00	4	1.32
FRKLN4AC178	10	118.27	5.17	27	18.19
FRKLN4AC198	18	88.49	8.78	47	21.48
FRKLN8A4150	579	16.71	58.54	38	29.51
FRKLN8A4185	841	10.48	73.73	54	13.08
FRKLN8A4200	22	0.00	100.00	100	0.00
FRKLN8A8215	89	32.41	41.74	35	30.10
FRKLN8AV335	106	14.48	90.62	89	10.68
FRKLN8AV350	204	12.02	89.80	58	38.19
FRKLN8V4	112	32.18	58.87	150	53.85
FRKLN8V6245	4	122.31	20.00	35	0.00
FRKLN8VS335	48	31.01	74.58	50	7.17
GE CF700	405	2.07	98.70	359	7.86
GE CJ810	728	8.68	79.81	312	10.93
GLADENK5	4	129.32	9.43	18	0.00
GLADENR5	128	17.07	68.63	43	22.67

TABLE 2 - 20

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES  
BY ENGINE MANUFACTURER/MODEL GROUP  
1984

PAGE 2 OF 2

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
JACOBPR755	363	8.79	85.15	95	16.50
JACOBPR755	143	27.26	38.74	35	21.75
JACOBPR755	6	197.51	7.87	116	22.66
LYC 0540	7697	2.23	90.99	133	6.39
LYC LTS101	132	6.48	97.25	351	6.11
LYC 0145	493	15.11	58.89	28	22.35
LYC 0235	10582	2.32	85.52	266	8.01
LYC 0290	2020	7.88	61.37	58	11.92
LYC 0320	36780	1.08	90.80	150	4.45
LYC 0340	125	7.98	91.19	82	10.73
LYC 0360	25502	1.17	91.83	147	5.60
LYC 0435	1037	10.47	68.93	194	16.63
LYC 0480	900	11.07	63.12	165	15.24
LYC 0540	13507	1.62	89.50	242	4.25
LYC 0541	1129	3.10	95.68	200	12.27
LYC 0720	258	6.90	96.88	195	23.87
LYC R680	298	18.68	45.25	54	12.37
LYC T53	19	44.22	45.45	127	22.11
MNASCO4	18	30.41	73.68	18	16.96
ONAN 848	26090	2.06	71.57	254	3.45
PCKARDV1650	40	48.40	40.79	42	34.79
PWA JT12	404	5.64	88.12	267	10.56
PWA JT15	1061	1.32	99.49	288	7.47
PWA JT3D	60	60.16	18.18	236	5.96
PWA JT8	204	19.03	55.00	893	20.62
PWA PT8	2851	1.34	98.13	439	6.70
PWA R1340	1789	8.92	74.65	282	8.35
PWA R1830	455	10.99	87.77	279	33.08
PWA R2000	167	0.00	100.00	206	9.33
PWA R2800	513	13.45	86.82	385	16.25
PWA R985	1754	10.38	48.96	231	12.75
RROYCEDART	387	2.06	98.60	473	8.46
RROYCEGIPSY	9	50.44	14.29	51	42.46
RROYCEVIPER	92	0.00	100.00	453	13.36
ALL ENGINES	252555	0.42	83.51	175	1.34

NOTE: ENGINE MANUFACTURER/MODEL GROUPS FOR WHICH SEPARATE ESTIMATES ARE NOT AVAILABLE ARE NOT LISTED IN THE TABLE, BUT ARE INCLUDED IN THE "ALL ENGINES" ESTIMATES.

TABLE 2 - 21

GENERAL AVIATION FUEL CONSUMPTION  
BY AIRCRAFT TYPE  
1984

AIRCRAFT TYPE	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
FIXED WING			
PISTON			
1 ENG 1-3 SEATS	10.05	86.28	3.6
1 ENG 4+ SEATS	11.26	167.97	4.1
TOTAL 1 ENG	10.82	254.25	5.5
2 ENG 1-6 SEATS	27.94	83.39	3.3
2 ENG 7+ SEATS	36.44	94.76	6.1
TOTAL 2 ENG	31.90	178.15	6.6
OTHER PISTON	207.74	21.25	6.4
TOTAL PISTON	15.54	453.65	8.5
TURBOPROP			
2 ENG 1-12 SEATS	79.40	136.19	7.2
2 ENG 13+ SEATS	130.35	96.05	10.4
TOTAL 2 ENG	94.71	232.24	11.5
OTHER TURBOPROP	120.69	6.57	2.0
TOTAL TURBOPROP	95.28	238.81	11.7
TURBOJET			
2 ENG	269.26	340.18	14.9
OTHER	646.26	92.97	21.6
TOTAL TURBOJET	307.80	433.15	19.9
TOTAL FIXED WING	34.00	1125.61	19.9
ROTORCRAFT			
PISTON	14.64	8.66	1.0
TURBINE	35.16	66.93	4.5
TOTAL ROTORCRAFT	30.29	75.59	4.5
OTHER	3.17	0.02	0.1
TOTAL AIRCRAFT	33.44	1201.22	20.3
TOTAL JET FUEL	127.02	738.89	23.5
TOTAL AVIATION GASOLINE	15.37	462.33	8.6

TABLE 2 - 22  
GENERAL AVIATION MILES FLOWN  
BY AIRCRAFT TYPE  
NAUTICAL MILES (IN THOUSANDS)  
1984

PAGE 1 OF 2

AIRCRAFT TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSR	WORK	COMM	TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS	317	32251	220074	213474	144798	22776	12456	0	0	6736	69623	722505
1 ENG: 4+ SEATS	45986	488136	563876	130071	12195	53992	10214	9837	65838	9904	161781	1551840
1 ENGINE: TOTAL	46313	520387	783950	343545	156993	76768	22670	9837	65838	16640	231403	2274345
2 ENG: 1-6 SEATS	95305	168179	49215	6967	851	9002	0	21986	67537	3589	9561	432193
2 ENG: 7+ SEATS	104123	69628	8141	2055	4832	5187	645	72599	103595	2144	5783	378732
2 ENG: TOTAL	199428	237807	57357	9022	5684	14189	645	94585	171131	5733	15344	810924
PISTON	178	182	37	0	1736	11	68	415	11902	25	6973	21526
PISTON TOTAL	245919	758375	841344	352567	164413	90967	23384	104837	248871	22398	253720	3108795
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS	213874	65930	2316	0	0	1691	774	8403	35038	4391	1861	334278
2 ENG: 13+ SEATS	24206	496	0	69	0	312	106	105649	2073	1221	10	134142
2 ENGINE: TOTAL	238080	66426	2316	69	0	2003	880	114051	37111	5611	1871	468420
TURBOPROP: OTHER	1168	447	0	0	4202	106	0	0	0	1246	62	7228
TURBOPROP: TOTAL	239248	66873	2316	69	4202	2110	880	114051	37111	6857	1933	475649

TABLE 2 - 22  
GENERAL AVIATION MILES FLOWN  
BY AIRCRAFT TYPE  
NAUTICAL MILES (IN THOUSANDS)  
1984

PAGE 2 OF 2

AIRCRAFT TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSER	WORK	COMM	TAXI	OTHER	RENTAL	TOTAL
FIXED WING - TURBOJET												
2 ENGINE TURBOJET	428665	32194	3709	16	0	0	0	32470	41622	6221	248	545147
TURBOJET: OTHER	40149	18929	178	63	0	0	0	15551	376	7171	1783	84200
TURBOJET: TOTAL	468815	51123	3887	79	0	0	0	48021	41999	13392	2032	829347
FIXED WING: TOTAL	953980	876371	847547	352716	188615	93077	24264	268909	327981	42646	257685	4211791
ROTORCRAFT:												
PISTON	811	1792	2026	8073	5840	7817	91	0	874	6342	179	33845
TURBINE	34303	4756	511	1085	8247	21291	3901	246	40348	21485	1806	137979
ROTORCRAFT: TOTAL	35114	6548	2537	9158	14087	29108	399	246	41222	27828	1985	171825
OTHER	105	104	6317	1341	0	0	0	0	0	452	1208	9527
TOTAL	989199	883023	856401	383215	182702	122185	28255	267155	389203	70926	260878	4393142

TABLE 2-23

## NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS

1984										PAGE 1 OF 2	
	1	2	3	4	5	6	7	8	TOTALS		
LOCALIZER	58	287	3674	10883	77	41	1105	605	18728		
	% STD ERR	33.6	10.5	6.3	*	*	19.2	26.7	4.9		
	ROW %	0.3	1.7	22.0	85.1	0.2	6.6	3.6	6.3		
	COLUMN %	0.1	1.7	9.0	13.5	10.8	6.8	0.9			
LOCALIZER, MARKER MARKER BEACON	51	24	909	6900	39	58	897	1328	10202		
	% STD ERR	*	22.1	8.0	*	*	22.8	18.3	6.5		
	ROW %	0.5	0.2	8.9	67.6	0.4	8.8	13.0	3.8		
	COLUMN %	0.1	0.1	2.2	8.5	5.5	5.5	1.9			
LOCALIZER, MARKER BEACON, GLIDE SLOPE	285	190	2394	35228	222	543	11438	47498	97796		
	% STD ERR	40.4	48.2	13.8	3.1	27.6	6.2	2.3	1.3		
	ROW %	0.3	0.2	2.4	36.0	0.8	11.7	48.6	36.6		
	COLUMN %	0.7	1.2	5.9	43.6	33.3	70.3	69.7			
LOCALIZER, MARKER BEACON, GLIDE SLOPE, RADAR ALTIMETER	38	23	205	1437	39	226	517	17881	20366		
	% STD ERR	*	36.5	15.0	*	34.0	29.6	2.9	2.7		
	ROW %	0.2	0.1	1.0	7.1	1.1	2.5	87.8	7.6		
	COLUMN %	0.1	0.1	0.5	1.8	13.8	3.2	26.2			
LONG RANGE NAV (INCLUDES OMEGA, LORAN-C)	206	1292	1227	5778	0	183	2428	12223	23337		
	% STD ERR	47.9	16.2	19.0	8.3	44.5	13.1	4.7	3.6		
	ROW %	0.9	5.5	5.3	24.8	0.8	10.4	52.4	8.7		
	COLUMN %	0.5	7.9	3.0	7.2	11.2	14.9	17.9			
RADAR ALTIMETER	47	166	212	1854	42	236	641	18310	21307		
	% STD ERR	*	49.7	35.5	14.0	32.9	26.3	2.8	2.7		
	ROW %	0.2	0.8	1.0	7.8	1.1	3.0	85.9	8.0		
	COLUMN %	0.1	1.0	0.5	2.0	14.5	3.9	26.9			
MICROWAVE LANDING SYSTEM	121	18	39	601	25	4	163	1113	2084		
	% STD ERR	*	*	28.2	*	*	*	18.2	13.9		
	ROW %	5.8	0.9	1.9	28.8	0.2	7.8	53.4	0.8		
	COLUMN %	0.3	0.1	0.1	0.7	0.2	1.0	1.6			
LOCALIZER, MARKER BEACON, GLIDE SLOPE, MICROWAVE LANDING SYSTEM	0	0	18	367	25	2	148	1105	1662		
	% STD ERR	0.0	0.0	35.3	*	*	*	18.3	15.3		
	ROW %	0.0	0.0	1.0	22.1	0.1	8.9	66.5	0.8		
	COLUMN %	0.0	0.0	0.0	0.5	0.1	0.9	1.6			

TABLE 2-23

NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

		1984								PAGE 2 OF 2	
		1	2	3	4	5	6	7	8	TOTALS	
LONG RANGE NAV, MICROWAVE LANDING SYSTEM	ESTIMATE	0	0	13	170	0	0	0	389	553	
	% STD ERR	0.0	0.0	*	*	0.0	0.0	0.0	26.8	24.3	
	ROW %	0.0	0.0	2.4	30.7	0.0	0.0	0.0	66.7		
	COLUMN %	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5	0.2	
NO REGULATORY AVIONICS	ESTIMATE	41971	14564	32782	24794	332	713	2068	604	117805	
	% STD ERR	1.9	4.2	3.0	3.8	36.0	21.3	15.2	27.7	1.0	
	ROW %	35.6	12.4	27.8	21.0	0.3	0.6	1.8	0.5		
	COLUMN %	98.3	88.6	80.4	30.7	46.6	43.7	12.7	0.9	44.1	
ALL AIRCRAFT	ESTIMATE	42689	16431	40743	80802	712	1632	16280	68129	267429	
	% STD ERR	1.9	4.0	2.7	1.7	25.2	14.6	5.1	1.6		
	ROW %	16.0	6.1	15.2	30.2	0.3	0.6	6.1	25.5		
	COLUMN %										

## HIERARCHICAL CAPABILITY GROUPS KEY

- 1 - NO REGULATORY AVIONICS  
 2 - TWO-WAY COMMUNICATIONS  
 3 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: VOR, ADF OR RNAV  
 4 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, VOR OR RNAV  
 5 - 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT  
 6 - TWO-WAY COMMUNICATIONS: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT  
 7 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT  
 8 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, VOR OR RNAV, DME

\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-24

## PRIMARY USE VS. HIERARCHICAL CAPABILITY GROUPS

1984										PAGE 1 OF 2	
	1	2	3	4	5	6	7	8	TOTALS		
EXECUTIVE	ESTIMATE	173	205	358	1847	45	670	13781	17071		
	% STD ERR	43.5	42.2	27.0	13.2	*	25.0	3.7	3.4		
	ROW %	1.0	1.2	2.1	10.8	0.3	3.9	80.6	80.6		
BUSINESS	COLUMN %	0.4	1.2	0.9	2.3	6.3	4.1	20.2	6.4		
	ESTIMATE	535	515	3346	13420	78	3506	26959	48398		
	% STD ERR	26.6	20.1	10.7	5.5	*	11.0	3.3	2.4		
PERSONAL	ROW %	1.1	1.1	6.9	27.7	0.2	7.2	55.7	55.7		
	COLUMN %	1.3	3.1	8.2	16.6	10.7	21.5	39.6	18.1		
INSTRUCTIONAL	ESTIMATE	12826	6987	23783	44780	268	7384	14306	110625		
	% STD ERR	4.3	6.5	3.7	2.7	42.8	7.8	5.2	1.3		
	ROW %	11.6	6.3	21.5	40.5	0.2	6.7	12.9	12.9		
AERIAL APPLICATIONS	COLUMN %	30.0	42.5	58.4	55.4	37.6	45.2	21.0	41.4		
	ESTIMATE	844	855	2687	8729	0	1338	1415	15913		
	% STD ERR	18.2	20.5	13.9	7.2	0.0	20.6	17.6	5.1		
AERIAL OBSERVATION	ROW %	5.3	5.4	16.9	54.9	0.0	8.4	8.9	8.0		
	COLUMN %	2.0	5.2	6.6	10.8	0.0	8.2	2.1	6.0		
OTHER WORK USE	ESTIMATE	5988	1012	141	400	0	110	85	7805		
	% STD ERR	3.8	16.9	*	27.1	0.0	*	49.0	3.3		
	ROW %	78.7	13.0	1.8	5.1	0.0	1.4	1.1	2.9		
COMPUTER AIR CARRIER	COLUMN %	14.0	6.2	0.3	0.5	0.0	0.7	0.1	0.5		
	ESTIMATE	338	752	1154	1543	0	823	814	5431		
	% STD ERR	34.8	20.2	20.2	17.1	0.0	24.0	20.6	8.6		
OTHER WORK USE	ROW %	6.2	13.8	21.2	28.4	0.0	15.2	15.0	2.0		
	COLUMN %	0.8	4.6	2.8	1.9	0.0	5.1	1.2	0.5		
COMPUTER AIR CARRIER	ESTIMATE	307	315	287	363	0	25	101	1421		
	% STD ERR	30.4	31.7	28.8	35.3	0.0	*	45.3	14.7		
	ROW %	21.6	22.2	20.2	25.5	0.0	1.8	7.1	0.5		
COMPUTER AIR CARRIER	COLUMN %	0.7	1.9	0.7	0.4	0.0	0.2	0.1	0.5		
	ESTIMATE	0	6	28	414	0	42	805	1295		
	% STD ERR	0.0	*	*	25.8	0.0	*	14.4	12.0		
COMPUTER AIR CARRIER	ROW %	0.0	0.5	2.2	32.0	0.0	3.2	62.2	0.5		
	COLUMN %	0.0	0.0	0.1	0.5	0.0	0.3	1.2	0.5		



TABLE 2-24

PRIMARY USE VS. HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

		1984								PAGE 2 OF 2	
		1	2	3	4	5	6	7	8	TOTALS	
AIR TAXI	ESTIMATE	24	1613	86	1076	50	988	373	3247	7457	
	% STD ERR	*	12.7	43.7	18.4	*	19.1	35.3	10.3	6.4	
	ROW %	0.3	21.6	1.2	14.4	0.7	13.2	5.0	43.5	2.8	
	COLUMN %	0.1	9.8	0.2	1.3	7.0	60.5	2.3	4.8		
OTHER USES	ESTIMATE	887	1180	824	500	29	69	239	1576	5105	
	% STD ERR	20.3	17.7	27.7	21.2	*	*	42.5	14.1	8.1	
	ROW %	17.4	23.1	12.2	9.8	0.6	1.4	4.7	30.9	1.9	
	COLUMN %	2.1	7.2	1.5	0.8	4.1	4.2	1.5	2.3		
RENTAL	ESTIMATE	559	324	406	3494	168	0	1385	3096	9433	
	% STD ERR	25.0	28.5	37.0	12.0	*	0.0	19.9	12.0	6.9	
	ROW %	5.9	3.4	4.3	37.0	1.8	0.0	14.7	32.8	3.5	
	COLUMN %	1.3	2.0	1.0	4.3	23.6	0.0	8.5	4.5		
INACTIVE	ESTIMATE	20451	2800	7236	4871	13	100	504	1892	37667	
	% STD ERR	3.6	11.2	6.9	8.9	*	*	28.8	13.1	2.6	
	ROW %	54.0	7.4	19.1	12.9	0.0	0.3	1.3	5.0	14.2	
	COLUMN %	47.9	17.0	17.8	6.0	1.8	6.1	3.1	2.8		
TOTALS	ESTIMATE	42889	16431	40743	80802	712	1632	16280	68129	267429	
	% STD ERR	1.9	4.0	2.7	1.7	25.2	14.6	5.1	1.6		
	ROW %	16.0	6.1	15.2	30.2	0.3	0.6	6.1	25.5		

## HIERARCHICAL CAPABILITY GROUPS KEY

- 1 - NO REGULATORY AVIONICS  
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 4 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, VOR OR RNAV  
 5 - 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT  
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\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-25  
HOURS FLOWN VS. HIERARCHICAL CAPABILITY GROUPS

1984											PAGE 1 OF 2
		1	2	3	4	5	6	7	8	TOTALS	
1 - 49 HOURS	ESTIMATE	10639	5209	14423	20530	177	174	2425	6114	59691	
	% STD ERR	5.3	7.6	5.1	4.4	*	45.5	13.4	7.8	2.2	
	ROW %	17.8	8.7	24.2	34.4	0.3	0.3	4.1	10.2	22.3	
	COLUMN %	24.9	31.7	35.4	25.4	24.9	10.7	14.9	9.0		
50 - 99 HOURS	ESTIMATE	3964	3093	9915	20575	199	212	3754	12387	54099	
	% STD ERR	9.1	10.4	6.5	4.4	47.9	35.9	11.0	5.6	2.5	
	ROW %	7.3	5.7	18.3	38.0	0.4	0.4	6.9	22.8	20.2	
	COLUMN %	9.3	18.8	24.3	25.5	27.9	13.0	23.1	18.2		
100 - 149 HOURS	ESTIMATE	1772	1432	3196	13255	91	172	3144	13115	38177	
	% STD ERR	14.5	15.5	11.3	5.8	*	47.1	12.1	5.4	3.2	
	ROW %	4.9	4.0	8.8	38.6	0.3	0.5	8.7	38.3	13.5	
	COLUMN %	4.2	8.7	7.8	18.4	12.8	10.5	19.3	19.3		
150 - 199 HOURS	ESTIMATE	927	645	1377	5783	1	63	1758	7558	18088	
	% STD ERR	18.7	23.1	17.5	8.8	*	*	16.6	6.9	4.6	
	ROW %	5.1	3.8	7.6	31.9	0.0	0.3	9.7	41.8	6.8	
	COLUMN %	2.2	3.9	3.4	7.1	0.1	3.9	10.8	11.1		
200 - 249 HOURS	ESTIMATE	1428	786	917	4273	18	93	994	7802	18310	
	% STD ERR	15.8	22.1	22.7	10.4	*	*	21.4	7.0	4.9	
	ROW %	8.8	4.8	5.6	28.2	0.1	0.6	6.1	47.8	6.1	
	COLUMN %	3.3	4.8	2.3	5.3	2.5	5.7	6.1	11.5		
250 - 299 HOURS	ESTIMATE	435	200	585	2224	125	76	730	3908	8283	
	% STD ERR	24.4	38.0	30.1	14.7	*	*	27.4	9.8	7.1	
	ROW %	5.3	2.4	7.1	28.9	1.5	0.9	8.8	47.2	3.1	
	COLUMN %	1.0	1.2	1.4	2.8	17.6	4.7	4.5	5.7		
300 - 349 HOURS	ESTIMATE	891	478	828	2438	4	180	889	4078	9780	
	% STD ERR	17.8	28.5	24.2	14.3	*	49.8	24.4	9.5	6.5	
	ROW %	9.1	4.9	8.4	24.9	0.0	1.8	9.1	41.7	3.7	
	COLUMN %	2.1	2.9	2.0	3.0	0.6	11.0	5.5	6.0		
350 - 399 HOURS	ESTIMATE	489	193	295	1028	0	67	219	2212	4483	
	% STD ERR	26.1	42.6	40.3	22.0	0.0	*	48.9	12.2	8.2	
	ROW %	10.5	4.3	6.6	22.8	0.0	1.5	4.9	49.3	1.7	
	COLUMN %	1.1	1.2	0.7	1.3	0.0	4.1	1.3	3.2		

TABLE 2-25

HOURS FLOWN VS. HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

		1984										PAGE 2 OF 2	
		1	2	3	4	5	6	7	8	TOTALS			
400 - 449 HOURS	ESTIMATE	497	457	197	1639	17	57	329	2754	5948			
	% STD ERR	27.2	28.2	*	17.0	*	*	40.2	11.8	8.3			
	ROW %	8.4	7.7	3.3	27.6	0.3	1.0	5.5	48.3				
450+ HOURS	COLUMN %	1.2	2.8	0.5	2.0	2.4	3.5	2.0	4.0	2.2			
	ESTIMATE	1342	1220	1063	4751	3	468	1613	8208	16670			
	% STD ERR	15.7	15.5	20.8	9.8	*	27.3	17.8	6.8	4.5			
INACTIVE	ROW %	8.1	7.3	6.4	28.5	0.0	2.8	9.7	37.2				
	COLUMN %	3.1	7.4	2.6	5.9	0.4	28.7	9.9	9.1	6.2			
	ESTIMATE	20451	2800	7236	4871	13	100	504	1892	37887			
TOTALS	% STD ERR	3.6	11.2	6.9	8.9	*	*	28.8	13.1	2.6			
	ROW %	54.0	7.4	19.1	12.9	0.0	0.3	1.3	5.0				
	COLUMN %	47.9	17.0	17.8	6.0	1.8	6.1	3.1	2.8	14.2			
TOTALS	ESTIMATE	42689	16431	40743	80802	712	1632	16280	88129	267429			
	% STD ERR	1.9	4.0	2.7	1.7	25.2	14.6	5.1	1.6				
	ROW %	16.0	6.1	15.2	30.2	0.3	0.6	6.1	25.5				

## HIERARCHICAL CAPABILITY GROUPS KEY

- 1 - NO REGULATORY AVIONICS  
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 3 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: VOR, ADF OR RNAV  
 4 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, VOR OR RNAV  
 5 - 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT  
 6 - TWO-WAY COMMUNICATIONS: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT  
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\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-26

## AGE OF AIRCRAFT VS. HIERARCHICAL CAPABILITY GROUPS

1984									
PAGE 1 OF 2									
	1	2	3	4	5	6	7	8	TOTALS
0 - 4 YEARS	ESTIMATE	4285	3133	6340	220	409	2839	17850	41827
	% STD ERR	8.8	12.7	8.2	47.3	31.4	13.3	4.1	2.7
	ROW %	10.2	7.5	15.2	0.5	1.0	6.8	42.2	15.6
	COLUMN %	26.1	7.7	7.8	30.9	25.1	17.4	25.9	
5 - 9 YEARS	ESTIMATE	2501	4964	19115	215	635	5485	22993	61830
	% STD ERR	11.3	9.7	4.5	44.3	24.4	9.3	3.8	2.2
	ROW %	4.0	8.0	30.9	0.3	1.0	8.9	37.2	23.1
	COLUMN %	15.2	12.2	23.7	30.2	38.8	33.7	33.7	
10 - 14 YEARS	ESTIMATE	2387	4079	12417	97	107	2428	9538	34843
	% STD ERR	12.6	10.9	5.9	*	48.8	14.1	6.1	3.3
	ROW %	6.9	11.8	35.8	0.3	0.3	7.0	27.5	13.0
	COLUMN %	14.5	10.0	15.4	13.6	6.6	14.9	14.0	
15 - 19 YEARS	ESTIMATE	1563	8221	18615	0	148	2210	10078	44330
	% STD ERR	15.8	7.5	4.6	0.0	37.4	14.2	5.4	2.7
	ROW %	3.5	18.5	42.0	0.0	0.3	5.0	22.7	16.6
	COLUMN %	9.5	20.2	23.0	0.0	9.1	13.6	14.8	
20 - 24 YEARS	ESTIMATE	946	3906	10580	49	128	1198	4795	24038
	% STD ERR	19.8	10.6	6.3	*	*	18.7	8.4	3.8
	ROW %	3.9	16.2	44.0	0.2	0.5	5.0	19.9	9.0
	COLUMN %	5.8	9.6	13.1	6.9	7.8	7.3	7.0	
25 - 29 YEARS	ESTIMATE	879	5208	7718	92	31	1328	1808	18555
	% STD ERR	20.5	8.5	6.7	*	*	18.8	14.1	4.1
	ROW %	4.7	28.1	41.6	0.5	0.2	7.1	9.7	6.9
	COLUMN %	5.3	12.8	9.6	12.9	1.9	8.1	2.7	
30 - 34 YEARS	ESTIMATE	637	3029	2559	3	0	232	659	8322
	% STD ERR	25.1	9.6	10.6	*	0.0	36.2	20.8	5.1
	ROW %	7.7	36.4	30.7	0.0	0.0	2.8	7.9	3.1
	COLUMN %	3.9	7.4	3.2	0.4	0.0	1.4	1.0	

TABLE 2-28

AGE OF AIRCRAFT VS. HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

		1984								PAGE 2 OF 2	
		1	2	3	4	5	6	7	8	TOTALS	
35+ YEARS	ESTIMATE	18772	3462	8397	3666	44	186	410	868	33808	
	% STD ERR	2.9	8.7	4.4	8.4	*	44.1	29.1	17.0	1.4	
	ROW %	49.6	10.2	24.8	10.8	0.1	0.6	1.2	2.6		
	COLUMN %	39.3	21.1	20.6	4.5	6.2	11.4	2.5	1.3	12.6	
TOTALS	ESTIMATE	42689	16431	40743	80802	712	1632	16280	68129	267429	
	% STD ERR	1.9	4.0	2.7	1.7	25.2	14.6	5.1	1.6		
	ROW %	16.0	6.1	15.2	30.2	0.3	0.6	6.1	25.5		

## HIERARCHICAL CAPABILITY GROUPS KEY

- 1 - NO REGULATORY AVIONICS  
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\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-27

## COMPUTED AIRCRAFT TYPE VS. HIERARCHICAL CAPABILITY GROUPS

1984										PAGE 1 OF 3	
	1	2	3	4	5	6	7	8	TOTALS		
FIXED WING - PISTON: SINGLE ENGINE 1-3 SEATS	30959	6913	24549	20708	74	263	2147	917	88531		
	% STD ERR	2.2	3.4	3.4	*	32.9	15.0	22.0	0.0		
	ROW %	35.8	8.0	28.4	0.1	0.3	2.5	1.1			
	COLUMN %	72.5	42.1	60.3	10.4	16.1	13.2	1.3	32.4		
SINGLE ENGINE 4+ SEATS	3596	1934	14579	52924	516	388	12842	35205	121982		
	% STD ERR	9.2	12.9	4.6	2.1	34.1	5.7	2.8	0.0		
	ROW %	2.9	1.8	12.0	43.4	0.4	10.5	28.9			
	COLUMN %	8.4	11.8	35.8	65.5	23.7	78.9	51.7	45.6		
TWO ENGINES 1-6 SEATS	413	33	372	3569	46	235	523	13738	18929		
	% STD ERR	21.4	*	27.1	7.9	37.0	22.6	2.3	0.0		
	ROW %	2.2	0.2	2.0	18.9	1.2	2.8	72.6			
	COLUMN %	1.0	0.2	0.9	4.4	14.4	3.2	20.2	7.1		
TWO ENGINES 7+ SEATS	262	190	221	1273	22	310	177	7722	10177		
	% STD ERR	38.7	42.8	48.4	16.8	38.1	*	2.9	0.0		
	ROW %	2.6	1.9	2.2	12.5	3.0	1.7	75.9			
	COLUMN %	0.6	1.2	0.5	1.6	19.0	1.1	11.3	3.8		
OTHER	63	0	18	162	0	0	14	135	392		
	% STD ERR	*	0.0	*	22.9	0.0	47.5	24.2	0.0		
	ROW %	16.1	0.0	4.6	41.3	0.0	3.6	34.4			
	COLUMN %	0.1	0.0	0.0	0.2	0.0	0.1	0.2	0.1		
FIXED WING - TURBOPROP: 2 ENGINES 1-12 SEATS	44	0	131	202	17	109	42	4586	5131		
	% STD ERR	*	0.0	46.1	31.8	44.5	*	2.4	0.0		
	ROW %	0.9	0.0	2.6	3.9	2.1	0.8	89.4			
	COLUMN %	0.1	0.0	0.3	0.2	6.7	0.3	6.7	1.9		
2 ENGINES 13+ SEATS	5	5	9	26	0	0	47	599	691		
	% STD ERR	*	*	*	0.0	0.0	*	5.8	0.0		
	ROW %	0.7	0.7	1.3	3.8	0.0	6.8	86.7			
	COLUMN %	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.3		
OTHER	70	10	3	10	0	0	0	103	195		
	% STD ERR	26.4	*	*	*	0.0	0.0	14.4	0.0		
	ROW %	35.9	5.1	1.5	5.1	0.0	0.0	52.8			
	COLUMN %	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.1		

TABLE 2-27

COMPUTED AIRCRAFT TYPE VS. HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

		1984								PAGE 2 OF 3	
		1	2	3	4	5	6	7	8	TOTALS	
FIXED WING - TURBOJET: 2 ENGINES	ESTIMATE	12	11	17	248	0	87	14	3575	3942	
	% STD ERR	*	*	*	28.3	0.0	45.8	*	2.2	0.0	
	ROW %	0.3	0.3	0.4	8.2	0.0	1.7	0.4	90.7		
	COLUMN %	0.0	0.1	0.0	0.3	0.0	4.1	0.1	5.2	1.5	
OTHER	ESTIMATE	217	3	0	74	0	0	14	592	900	
	% STD ERR	24.4	*	0.0	48.7	0.0	0.0	*	9.9	0.0	
	ROW %	24.1	0.3	0.0	8.2	0.0	0.0	1.8	85.8		
	COLUMN %	0.5	0.0	0.0	0.1	0.0	0.0	0.1	0.9	0.3	
ROTORCRAFT: PISTON	ESTIMATE	2491	2259	393	257	0	71	28	20	5518	
	% STD ERR	8.3	7.5	20.7	29.9	0.0	*	*	*	0.0	
	ROW %	45.2	41.0	7.1	4.7	0.0	1.3	0.5	0.4		
	COLUMN %	5.8	13.7	1.0	0.3	0.0	4.4	0.2	0.0	2.1	
TURBINE	ESTIMATE	250	1494	372	1313	3	51	401	891	4774	
	% STD ERR	27.1	11.8	28.4	12.7	*	*	27.2	18.4	0.0	
	ROW %	5.2	31.3	7.8	27.5	0.1	1.1	8.4	18.7		
	COLUMN %	0.6	9.1	0.8	1.6	0.4	3.1	2.5	1.3	1.8	
OTHER AIRCRAFT	ESTIMATE	4307	3578	80	37	34	142	33	48	8258	
	% STD ERR	4.8	5.7	*	13.0	*	45.4	44.4	*	0.0	
	ROW %	52.2	43.3	1.0	0.4	0.4	1.7	0.4	0.6		
	COLUMN %	10.1	21.8	0.2	0.0	4.8	8.7	0.2	0.1	3.1	

TABLE 2-27

COMPUTED AIRCRAFT TYPE VS. HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

PAGE 3 OF 3

		1984							
ALL AIRCRAFT	ESTIMATE % STD ERR ROW %	1	2	3	4	5	6	7	8
		TOTALS							
		42889	18431	40743	80802	712	1832	18280	68129
		1.9	4.0	2.7	1.7	25.2	14.6	5.1	1.8
		16.0	6.1	15.2	30.2	0.3	0.6	6.1	25.5
									267428

## HIERARCHICAL CAPABILITY GROUPS KEY

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\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.



TABLE 2-28

## BASE AIRPORT REGION VS. HIERARCHICAL CAPABILITY GROUPS

PAGE 1 OF 2

1984

	1	2	3	4	5	6	7	8	TOTALS
ALASKAN	ESTIMATE	687	1074	2262	0	19	280	842	8904
	% STD ERR	24.1	17.0	12.2	0.0	*	41.9	20.0	6.0
	ROW %	7.7	12.1	25.4	0.0	0.2	2.8	9.5	
	COLUMN %	1.6	6.5	2.8	0.0	1.2	1.6	1.2	3.3
CENTRAL	ESTIMATE	3138	871	5494	0	181	400	3675	15873
	% STD ERR	10.3	20.5	9.3	0.0	45.9	34.7	10.7	5.1
	ROW %	19.8	5.5	34.6	0.0	1.1	2.5	23.2	
	COLUMN %	7.3	5.3	6.8	0.0	11.1	2.5	5.4	5.9
EASTERN	ESTIMATE	4908	1201	8338	87	223	2084	7797	28985
	% STD ERR	8.3	16.5	7.4	*	43.5	15.3	6.9	3.6
	ROW %	16.9	4.1	28.8	0.2	0.8	7.2	26.9	
	COLUMN %	11.5	7.3	10.3	9.4	13.7	12.8	11.4	10.8
EUROPEAN OFFICE	ESTIMATE	42	68	17	0	0	0	428	825
	% STD ERR	*	*	*	0.0	0.0	0.0	31.3	26.4
	ROW %	6.7	10.6	2.7	0.0	0.0	0.0	68.2	
	COLUMN %	0.1	0.4	0.0	0.0	0.0	0.0	0.6	0.2
GREAT LAKES	ESTIMATE	8939	2474	14439	73	214	1863	10829	47838
	% STD ERR	6.0	12.3	5.5	*	42.5	16.5	6.0	2.7
	ROW %	18.8	5.2	30.3	0.2	0.4	3.9	22.7	
	COLUMN %	20.8	15.1	17.9	10.3	13.1	11.4	15.9	17.8
NEW ENGLAND	ESTIMATE	1571	589	2492	4	79	1059	2364	9929
	% STD ERR	15.0	21.1	13.5	*	*	22.8	13.0	6.5
	ROW %	15.8	5.9	25.1	0.0	0.8	10.7	23.8	
	COLUMN %	3.7	3.6	3.1	0.6	4.8	6.5	3.5	3.7
NORTHWEST MOUNTAIN	ESTIMATE	4371	2299	8868	68	231	1525	6313	28582
	% STD ERR	9.2	12.3	7.1	*	42.6	17.4	8.0	3.7
	ROW %	15.3	8.0	31.0	0.2	0.8	5.3	22.1	
	COLUMN %	10.2	14.0	11.0	9.3	14.2	9.4	9.3	10.7
SOUTHERN	ESTIMATE	5559	1829	12626	133	217	2720	11590	39844
	% STD ERR	7.9	14.5	6.0	*	36.6	13.6	5.5	3.1
	ROW %	14.0	4.6	31.7	0.3	0.5	6.8	29.1	
	COLUMN %	13.0	11.1	15.6	18.7	13.3	16.7	17.0	14.9

TABLE 2-28  
BASE AIRPORT REGION VS. HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

		1984								PAGE 2 OF 2	
		1	2	3	4	5	6	7	8	TOTALS	
SOUTHWESTERN	ESTIMATE	6707	2512	4750	11794	195	247	1737	12708	40647	
	% STD ERR	7.0	11.4	9.5	6.1	*	36.2	15.5	5.3	3.0	
	ROW %	16.5	8.2	11.7	29.0	0.5	0.6	4.3	31.3		
	COLUMN %	15.7	15.3	11.7	14.6	27.4	15.1	10.7	18.6	15.2	
WESTERN-PACIFIC	ESTIMATE	6495	3053	5173	14778	209	161	4210	12298	46376	
	% STD ERR	7.0	10.5	8.8	5.4	48.5	42.9	10.8	5.5	2.8	
	ROW %	14.0	6.6	11.2	31.9	0.5	0.3	9.1	26.5		
	COLUMN %	15.2	18.6	12.7	18.3	29.4	9.9	25.9	18.1	17.3	
TOTALS	ESTIMATE	42889	16431	40743	80802	712	1632	18280	68128	267429	
	% STD ERR	1.9	4.0	2.7	1.7	25.2	14.6	5.1	1.6		
	ROW %	16.0	6.1	15.2	30.2	0.3	0.6	8.1	25.5		

HIERARCHICAL CAPABILITY GROUPS KEY

- 1 - NO REGULATORY AVIONICS
- 2 - TWO-WAY COMMUNICATIONS
- 3 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: VOR, ADF OR RNAV
- 4 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, VOR OR RNAV
- 5 - TWO-WAY COMMUNICATIONS, ALTITUDE ENCODING EQUIPMENT
- 6 - TWO-WAY COMMUNICATIONS, ALTITUDE ENCODING EQUIPMENT
- 7 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT
- 8 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS, AIR TAXIS: 4096 CODE TRANSPONDER, VOR OR RNAV, DME

\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-29  
PRIMARY USE VS. NON-HIERARCHICAL CAPABILITY GROUPS

1984											PAGE 1 OF 2	
	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT	
EXECUTIVE	ESTIMATE	275	325	5981	9329	4663	9581	319	288	110	885	
	% STD ERR	39.4	36.4	7.6	3.7	5.7	3.6	26.8	28.1	44.2	20.4	
	ROW %	1.6	1.9	35.0	54.6	27.3	56.1	1.9	1.7	0.6	5.1	
	COLUMN %	1.6	3.2	6.1	45.8	20.0	45.0	15.3	17.8	19.9	0.7	
BUSINESS	ESTIMATE	1401	2230	31888	5351	6440	5430	495	479	18	8984	
	% STD ERR	17.0	14.5	3.1	7.4	7.6	7.3	29.7	30.6	*	7.4	
	ROW %	2.9	4.6	65.9	11.1	13.3	11.2	1.0	1.0	0.0	14.4	
	COLUMN %	8.4	21.9	32.6	26.3	27.6	25.5	23.8	28.8	2.9	5.9	
PERSONAL	ESTIMATE	8765	5593	38010	1941	7236	2126	839	658	267	54505	
	% STD ERR	7.0	8.9	2.9	14.0	7.7	13.7	24.3	27.2	41.2	2.0	
	ROW %	7.9	5.1	34.4	1.8	6.5	1.9	0.8	0.6	0.2	49.3	
	COLUMN %	52.4	54.8	38.9	9.5	31.0	10.0	40.3	38.6	48.3	46.3	
INSTRUCTIONAL	ESTIMATE	2750	563	4769	243	648	245	165	104	100	7365	
	% STD ERR	13.1	31.9	10.3	34.8	23.9	34.6	46.6	44.9	48.3	7.7	
	ROW %	17.3	3.5	30.0	1.5	4.1	1.5	1.0	0.7	0.6	46.3	
	COLUMN %	16.4	5.5	4.9	1.2	2.8	1.1	7.9	6.3	18.1	6.3	
AERIAL APPLICATIONS	ESTIMATE	73	3	374	74	367	80	41	36	36	7075	
	% STD ERR	*	*	26.8	*	31.7	*	*	*	*	3.0	
	ROW %	0.9	0.0	4.8	0.9	4.7	1.0	0.5	0.5	0.5	90.6	
	COLUMN %	0.4	0.0	0.4	0.4	1.6	0.4	2.0	2.2	6.5	6.0	
AERIAL OBSERVATION	ESTIMATE	682	246	1723	174	621	230	18	0	2	2558	
	% STD ERR	24.5	37.5	16.3	43.9	23.5	37.7	*	0.0	*	12.7	
	ROW %	12.2	4.5	31.7	3.2	11.4	4.2	0.3	0.0	0.0	47.1	
	COLUMN %	4.0	2.4	1.8	0.9	2.7	1.1	0.9	0.0	0.4	2.2	
OTHER WORK USE	ESTIMATE	55	58	133	53	37	82	1	0	0	1119	
	% STD ERR	49.9	*	*	*	*	48.5	*	0.0	0.0	18.4	
	ROW %	3.9	4.1	9.4	3.7	2.6	5.8	0.1	0.0	0.0	78.7	
	COLUMN %	0.3	0.6	0.1	0.3	0.2	0.4	0.0	0.0	0.0	0.9	
COMPUTER AIR CARRIER	ESTIMATE	60	0	848	338	36	338	3	3	0	49	
	% STD ERR	*	0.0	15.6	22.5	32.4	22.5	*	*	0.0	*	
	ROW %	4.6	0.0	65.5	26.1	2.8	26.1	0.2	0.2	0.0	3.8	
	COLUMN %	0.4	0.0	0.9	1.7	0.2	1.6	0.1	0.2	0.0	0.0	

TABLE 2-29

PRIMARY USE VS. NON-HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

PAGE 2 OF 2

1984

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
AIR TAXI											
ESTIMATE	244	214	3928	1381	1299	1534	35	35	17	1070	7457
% STD ERR	34.1	45.7	9.7	13.9	18.2	13.6	*	*	45.2	15.8	6.4
ROW %	3.3	2.9	52.7	18.3	17.4	20.6	0.5	0.5	0.2	14.3	
COLUMN %	1.5	2.1	4.0	6.7	5.6	7.2	1.7	2.1	3.1	0.9	2.8
OTHER USES											
ESTIMATE	213	15	1012	717	849	767	8	1	1	3016	5105
% STD ERR	38.2	*	19.4	18.1	17.9	18.1	*	*	*	10.9	8.1
ROW %	4.2	0.3	19.8	14.0	16.6	15.0	0.2	0.0	0.0	59.1	
COLUMN %	1.3	0.1	1.0	3.5	3.6	3.6	0.4	0.1	0.2	2.6	1.9
RENTAL											
ESTIMATE	805	211	5888	258	477	261	15	12	0	2394	9433
% STD ERR	26.8	*	9.1	38.0	31.0	37.7	*	*	0.0	13.7	6.9
ROW %	8.5	2.2	60.3	2.7	5.1	2.8	0.2	0.1	0.0	25.4	
COLUMN %	4.8	2.1	5.8	1.3	2.0	1.2	0.7	0.7	0.0	2.0	3.5
INACTIVE											
ESTIMATE	1603	775	3791	591	613	712	185	46	1	30586	37867
% STD ERR	16.5	23.9	9.8	20.9	24.8	19.4	*	*	*	2.9	2.6
ROW %	4.2	2.0	10.0	1.6	1.6	1.9	0.4	0.1	0.0	80.8	
COLUMN %	9.6	7.6	3.9	2.9	2.6	3.3	7.9	2.8	0.2	26.0	14.2
TOTALS											
ESTIMATE	16728	10202	97796	20366	23337	21307	2084	1662	553	117805	267429
% STD ERR	4.9	6.5	1.3	2.7	3.6	2.7	13.9	15.3	24.3	1.0	
ROW %	6.3	3.8	36.6	7.6	8.7	8.0	0.8	0.6	0.2	44.1	

## NON-HIERARCHICAL CAPABILITY GROUPS KEY

GS	-	GLIDE SLOPE
L	-	LOCALIZER
LRN	-	LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA
MB	-	MARKER BEACON
ML	-	MICROWAVE LANDING SYSTEM
RA	-	RADAR ALTIMETER
NO	-	NO REGULATORY AVIONICS

\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-30  
HOURS FLOWN VS. NON-HIERARCHICAL CAPABILITY GROUPS

1984											PAGE 1 OF 2	
	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT	
1 - 49 HOURS	ESTIMATE	4614	2878	14408	1372	2055	1552	355	256	95	35614	59891
	% STD ERR	9.6	12.5	5.3	14.0	13.6	13.9	31.8	36.5	*	2.9	2.2
	ROW %	7.7	4.8	24.1	2.3	3.4	2.6	0.6	0.4	0.2	59.7	
	COLUMN %	27.6	28.2	14.7	6.7	8.8	7.3	17.0	15.4	17.2	30.2	22.3
50 - 99 HOURS	ESTIMATE	3762	2922	22027	2235	4985	2305	499	321	206	22178	54099
	% STD ERR	10.7	12.2	4.2	12.6	8.9	12.4	31.0	37.1	42.9	4.1	2.5
	ROW %	7.0	5.4	40.7	4.1	9.2	4.3	0.9	0.6	0.4	41.0	
	COLUMN %	22.5	28.6	22.5	11.0	21.4	10.8	23.9	19.3	37.3	18.8	20.2
100 - 149 HOURS	ESTIMATE	1898	1687	20132	2583	4085	2642	404	401	70	9453	38177
	% STD ERR	16.2	17.1	4.4	11.1	9.7	10.9	33.6	33.8	*	6.5	3.2
	ROW %	5.2	4.7	55.6	7.1	11.3	7.3	1.1	1.1	0.2	26.1	
	COLUMN %	11.3	16.5	20.6	12.7	17.5	12.4	19.4	24.1	12.7	8.0	13.5
150 - 199 HOURS	ESTIMATE	709	571	9956	2187	2188	2202	125	122	10	4388	18088
	% STD ERR	26.8	28.6	6.4	11.4	13.3	11.3	*	*	*	9.6	4.6
	ROW %	3.9	3.2	55.0	12.1	12.1	12.2	0.7	0.7	0.1	24.3	
	COLUMN %	4.2	5.6	10.2	10.7	9.4	10.3	6.0	7.3	1.8	3.7	6.8
200 - 249 HOURS	ESTIMATE	709	331	8484	2671	2200	2671	251	246	52	3751	16310
	% STD ERR	25.5	40.3	7.2	10.4	13.2	10.4	43.3	44.0	*	10.4	4.9
	ROW %	4.3	2.0	52.0	18.4	13.5	18.4	1.5	1.5	0.3	23.0	
	COLUMN %	4.2	3.2	8.7	13.1	9.4	12.5	12.0	14.8	9.4	3.2	6.1
250 - 299 HOURS	ESTIMATE	684	128	4494	1517	1331	1550	18	18	0	1343	8283
	% STD ERR	27.3	*	10.1	13.3	16.5	13.1	*	*	0.0	17.5	7.1
	ROW %	8.0	1.5	54.3	18.3	16.1	18.7	0.2	0.2	0.0	16.2	
	COLUMN %	4.0	1.3	4.6	7.4	5.7	7.3	0.9	1.1	0.0	1.1	3.1
300 - 349 HOURS	ESTIMATE	587	287	4403	1855	1420	1861	120	117	20	2453	9780
	% STD ERR	29.8	45.6	10.3	12.0	14.6	12.0	*	*	*	12.6	6.5
	ROW %	5.8	2.9	45.0	19.0	14.5	19.0	1.2	1.2	0.2	25.1	
	COLUMN %	3.4	2.8	4.5	9.1	6.1	8.7	5.8	7.0	3.6	2.1	3.7
350 - 399 HOURS	ESTIMATE	471	219	1779	1089	743	1132	8	3	0	871	4483
	% STD ERR	34.0	*	15.6	14.8	17.7	14.4	*	*	0.0	20.0	9.2
	ROW %	10.5	4.9	39.7	24.3	16.6	25.3	0.2	0.1	0.0	19.4	
	COLUMN %	2.8	2.1	1.8	5.3	3.2	5.3	0.4	0.2	0.0	0.7	1.7

TABLE 2-30

HOURS FLOWN VS. NON-HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

PAGE 2 OF 2

1984

	ESTIMATE % STD ERR ROW % COLUMN %	L	L, MB GS	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
400 - 449 HOURS		470	2	2519	1292	848	1407	85	82	80	1586	5948
		30.4	*	13.8	14.7	19.0	14.5	*	*	*	18.4	8.3
		7.9	0.0	42.4	21.7	14.3	23.7	1.4	1.4	1.3	26.7	
		2.8	0.0	2.6	6.3	3.6	6.6	4.1	4.9	14.5	1.3	2.2
450+ HOURS		1414	426	6066	3042	2801	3356	74	58	16	5068	16670
		18.4	32.7	8.2	7.7	9.9	7.6	42.4	47.5	*	8.9	4.5
		8.5	2.6	36.4	18.2	18.8	20.1	0.4	0.3	0.1	30.4	
		8.5	4.2	6.2	14.9	12.0	15.8	3.6	3.5	2.9	4.3	6.2
INACTIVE		1603	775	3791	591	613	712	185	46	1	30586	37867
		16.5	23.9	9.8	20.9	24.8	19.4	*	*	*	2.9	2.6
		4.2	2.0	10.0	1.6	1.6	1.9	0.4	0.1	0.0	80.8	
		9.6	7.6	3.9	2.9	2.6	3.3	7.9	2.8	0.2	26.0	14.2
TOTALS		16728	10202	97796	20366	23337	21307	2084	1662	553	117805	267429
		4.9	6.5	1.3	2.7	3.6	2.7	13.9	15.3	24.3	1.0	
		6.3	3.8	36.6	7.6	8.7	8.0	0.8	0.6	0.2	44.1	

## NON-HIERARCHICAL CAPABILITY GROUPS KEY

GS	-	GLIDE SLOPE
L	-	LOCALIZER
LRN	-	LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA
MB	-	MARKER BEACON
ML	-	MICROWAVE LANDING SYSTEM
RA	-	RADAR ALTIMETER
NO	-	NO REGULATORY AVIONICS

\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-31

## AGE OF AIRCRAFT VS. NON-HIERARCHICAL CAPABILITY GROUPS

1984											PAGE 1 OF 2	
	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT	
0 - 4 YEARS	ESTIMATE	2453	686	14789	7649	6425	7988	222	204	43	15180	41827
	% STD ERR	14.3	25.7	5.2	4.8	6.5	4.7	34.3	35.9	49.9	4.6	2.7
	ROW %	5.9	1.6	35.4	18.3	15.4	19.0	0.5	0.5	0.1	36.2	
	COLUMN %	14.7	6.7	15.1	37.6	27.5	37.4	10.7	12.3	7.8	12.9	15.6
5 - 9 YEARS	ESTIMATE	3768	1368	30493	6082	5699	8289	634	552	153	19240	61830
	% STD ERR	11.1	19.5	3.4	8.9	8.1	8.9	27.0	28.9	47.2	4.3	2.2
	ROW %	6.1	2.2	49.3	9.8	9.2	10.2	1.0	0.9	0.2	31.1	
	COLUMN %	22.5	13.4	31.2	29.9	24.4	29.5	30.4	33.2	27.7	16.3	23.1
10 - 14 YEARS	ESTIMATE	2251	1503	14973	2695	2834	2793	472	459	106	12829	34643
	% STD ERR	14.7	17.7	5.2	10.1	11.6	10.0	30.4	30.9	*	5.5	3.3
	ROW %	6.5	4.3	43.2	7.8	8.2	8.1	1.4	1.3	0.3	37.0	
	COLUMN %	13.5	14.7	15.3	13.2	12.1	13.1	22.6	27.6	19.2	10.9	13.0
15 - 19 YEARS	ESTIMATE	2380	2635	18577	2411	4049	2485	183	128	1	17616	44330
	% STD ERR	14.3	13.4	4.4	9.9	9.9	9.9	48.5	*	*	4.8	2.7
	ROW %	5.4	5.9	41.9	5.4	9.1	5.6	0.4	0.3	0.0	39.7	
	COLUMN %	14.2	25.8	19.0	11.8	17.4	11.7	8.8	7.7	0.2	15.0	16.6
20 - 24 YEARS	ESTIMATE	1784	1510	10383	700	1835	818	156	70	80	9371	24038
	% STD ERR	15.8	17.1	5.8	19.8	14.1	19.1	*	*	*	6.7	3.8
	ROW %	7.4	6.3	43.2	2.9	7.6	3.4	0.6	0.3	0.3	39.0	
	COLUMN %	10.7	14.8	10.6	3.4	7.9	3.8	7.5	4.2	14.5	8.0	9.0
25 - 29 YEARS	ESTIMATE	2003	1287	5680	286	1215	398	156	57	0	8862	18555
	% STD ERR	14.3	18.4	7.8	33.4	17.3	30.2	*	*	0.0	6.2	4.1
	ROW %	10.8	6.9	30.6	1.5	6.5	2.0	0.8	0.3	0.0	47.8	
	COLUMN %	12.0	12.6	5.8	1.4	5.2	1.7	7.5	3.4	0.0	7.5	6.9
30 - 34 YEARS	ESTIMATE	594	635	1330	117	251	124	44	44	0	5560	8322
	% STD ERR	22.5	25.6	14.4	49.1	27.8	46.9	*	*	0.0	6.9	5.1
	ROW %	7.1	7.6	16.0	1.4	3.0	1.5	0.5	0.5	0.0	66.8	
	COLUMN %	3.6	6.2	1.4	0.6	1.1	0.6	2.1	2.6	0.0	4.7	3.1

TABLE 2-31

AGE OF AIRCRAFT VS. NON-HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

		1984							PAGE 2 OF 2			
		L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
35+ YEARS	ESTIMATE	1663	622	1705	298	1036	301	243	163	166	28939	33806
	% STD ERR	13.3	22.2	12.2	27.7	16.8	27.5	34.1	39.6	39.1	1.6	1.4
	ROW %	4.9	1.8	5.0	0.9	3.1	0.9	0.7	0.5	0.5	85.6	
	COLUMN %	9.9	6.1	1.7	1.5	4.4	1.4	11.7	9.8	30.0	24.6	12.6
TOTALS	ESTIMATE	16728	10202	97796	20366	23337	21307	2084	1662	553	117805	267429
	% STD ERR	4.9	6.5	1.3	2.7	3.6	2.7	13.9	15.3	24.3	1.0	
	ROW %	6.3	3.8	36.6	7.6	8.7	8.0	0.8	0.6	0.2	44.1	
	COLUMN %											

## NON-HIERARCHICAL CAPABILITY GROUPS KEY

GS	-	GLIDE SLOPE
L	-	LOCALIZER
LRN	-	LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA
MB	-	MARKER BEACON
ML	-	MICROWAVE LANDING SYSTEM
RA	-	RADAR ALTIMETER
NO	-	NO REGULATORY AVIONICS

\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.



TABLE 2-32

## COMPUTED AIRCRAFT TYPE VS. NON-HIERARCHICAL CAPABILITY GROUPS

1984

PAGE 1 OF 3

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
FIXED WING - PISTON: SINGLE ENGINE 1-3 SEATS	7728	1845	4977	98	2159	110	255	91	89	70614	88531
	% STD ERR			*	14.5	*	40.0	*	*	1.0	0.0
	ROW %	8.9	2.1	5.8	2.5	0.1	0.3	0.1	0.1	81.8	
	COLUMN %	46.2	18.1	5.1	9.3	0.5	12.2	5.5	16.1	50.1	32.4
SINGLE ENGINE 4+ SEATS	7846	7820	71983	3014	10820	3275	1177	523	262	29889	121332
	% STD ERR			11.9	6.1	11.5	20.2	22.3	38.6	3.0	0.0
	ROW %	7.2	7.5	1.5	8.7	2.7	1.0	0.9	0.2	24.5	
	COLUMN %	45.7	74.7	73.6	45.5	15.4	56.5	57.0	47.4	25.4	45.6
TWO ENGINES 1-6 SEATS	142	414	13537	4012	2204	4063	274	267	57	798	18929
	% STD ERR			7.3	10.9	7.2	35.0	35.0	*	15.9	0.0
	ROW %	43.9	26.5	2.4	14.1	8.1	1.4	1.4	0.3	4.2	
	COLUMN %	0.8	2.2	71.5	11.6	21.5	13.1	16.1	10.3	0.7	7.1
TWO ENGINES 7+ SEATS	549	137	5284	3580	1800	3683	83	82	10	452	10177
	% STD ERR			5.4	14.1	8.1	*	*	*	31.5	0.0
	ROW %	31.1	1.3	51.9	15.7	36.0	0.8	0.8	0.1	4.4	
	COLUMN %	3.3	1.3	5.4	6.9	17.2	4.0	4.9	1.8	0.4	3.8
OTHER	0	1	285	32	23	32	0	0	0	72	392
	% STD ERR			15.0	*	*	0.0	0.0	0.0	*	0.0
	ROW %	0.0	0.3	72.7	5.9	8.2	0.0	0.0	0.0	18.4	
	COLUMN %	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.1	0.1
FIXED WING - TURBOPROP: 2 ENGINES 1-12 SEATS	9	76	684	4350	1311	4443	137	137	10	13	5131
	% STD ERR			16.4	10.8	2.5	39.5	39.5	*	*	0.0
	ROW %	0.2	1.5	12.9	25.6	86.8	2.7	2.7	0.2	0.3	
	COLUMN %	0.1	0.7	21.4	5.6	20.9	6.6	8.2	1.8	0.0	1.9
2 ENGINES 13+ SEATS	0	25	296	362	129	387	5	5	0	7	691
	% STD ERR			13.8	29.3	10.6	*	*	0.0	*	0.0
	ROW %	0.0	3.8	42.8	18.7	58.0	0.7	0.7	0.0	1.0	
	COLUMN %	0.0	0.2	0.3	0.6	1.8	0.2	0.3	0.0	0.0	0.3
OTHER	0	0	49	63	49	63	0	0	0	82	195
	% STD ERR			37.2	39.8	30.5	0.0	0.0	0.0	12.6	0.0
	ROW %	0.0	0.0	25.1	25.1	32.3	0.0	0.0	0.0	42.1	
	COLUMN %	0.0	0.0	0.1	0.2	0.3	0.0	0.0	0.0	0.1	0.1

TABLE 2-32

COMPUTED AIRCRAFT TYPE VS. NON-HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

PAGE 2 OF 3

1984

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
FIXED WING - TURBOJET: 2 ENGINES	ESTIMATE	0	16	181	3721	2784	3741	90	80	21	3942
	% STD ERR	0.0	*	26.7	1.4	4.1	1.4	32.2	32.2	*	0.0
	ROW %	0.0	0.4	4.6	94.4	70.9	94.9	2.3	2.0	0.5	1.5
	COLUMN %	0.0	0.2	0.2	18.3	12.0	17.8	4.3	14.5	0.0	0.0
OTHER	ESTIMATE	5	0	74	552	484	552	0	0	289	900
	% STD ERR	*	0.0	49.2	10.3	9.6	10.3	0.0	0.0	21.1	0.0
	ROW %	0.6	0.0	8.2	81.3	53.8	61.3	0.0	0.0	29.9	0.3
	COLUMN %	0.0	0.0	0.1	2.7	2.1	2.8	0.0	0.0	0.2	0.0
ROTORCRAFT: PISTON	ESTIMATE	43	0	62	0	250	3	4	0	5185	5518
	% STD ERR	*	0.0	*	0.0	28.9	*	*	0.0	1.7	0.0
	ROW %	0.8	0.0	1.1	0.0	4.5	0.1	0.1	0.0	94.0	2.1
	COLUMN %	0.3	0.0	0.1	0.0	1.1	0.0	0.2	0.0	4.4	0.0
TURBINE	ESTIMATE	573	67	401	543	1654	922	13	3	2053	4774
	% STD ERR	23.4	*	27.8	18.8	11.0	15.1	*	*	8.8	0.0
	ROW %	12.0	1.4	8.4	11.4	34.6	19.3	0.3	0.1	43.0	1.8
	COLUMN %	3.4	0.7	0.4	2.7	7.1	4.3	0.8	0.5	1.7	0.0
OTHER AIRCRAFT	ESTIMATE	32	0	3	42	59	54	45	42	8149	8258
	% STD ERR	44.2	0.0	*	*	*	*	*	*	0.5	0.0
	ROW %	0.4	0.0	0.0	0.5	0.7	0.7	0.5	0.5	98.7	3.1
	COLUMN %	0.2	0.0	0.0	0.2	0.3	0.3	2.2	7.6	8.9	0.0

TABLE 2-32

COMPUTED AIRCRAFT TYPE VS. NON-HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

ALL AIRCRAFT	ESTIMATE	L	1984					L, MB, GS, ML	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
			L, MB, GS	L, MB, GS, RA	LRN	RA	ML							
	18728	10202	97798	20368	23337	21307	2084	1882	553	117805	287429			
% STD ERR	4.9	6.5	1.3	2.7	3.6	2.7	13.9	15.3	24.3	1.0				
ROW %	6.3	3.8	36.6	7.6	8.7	8.0	0.8	0.8	0.2	44.1				

## NON-HIERARCHICAL CAPABILITY GROUPS KEY

GS - GLIDE SLOPE  
 L - LOCALIZER  
 LRN - LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA  
 MB - MARKER BEACON  
 ML - MICROWAVE LANDING SYSTEM  
 RA - RADAR ALTIMETER  
 NO - NO REGULATORY AVIONICS

\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-33

## BASE AIRPORT REGION VS. NON-HIERARCHICAL CAPABILITY GROUPS

1984											PAGE 1 OF 2
	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
ALASKAN	ESTIMATE	514	271	1837	426	911	495	159	159	5445	8904
	% STD ERR	21.6	37.1	13.6	24.0	19.5	23.7	41.2	41.2	7.9	6.0
	ROW %	5.8	3.0	20.8	4.8	10.2	5.6	1.8	1.8	61.2	3.3
	COLUMN %	3.1	2.7	1.9	2.1	3.9	2.3	9.6	28.8	4.6	
CENTRAL	ESTIMATE	677	587	5807	1231	911	1238	2	0	7471	15873
	% STD ERR	28.9	28.2	9.1	16.1	19.9	16.0	*	0.0	7.2	5.1
	ROW %	4.3	3.7	36.6	7.8	5.7	7.8	0.0	0.0	47.1	5.9
	COLUMN %	4.0	5.8	5.9	6.0	3.9	5.8	0.1	0.0	6.3	
EASTERN	ESTIMATE	1988	1146	10911	2374	2948	2476	216	39	12121	28985
	% STD ERR	15.6	19.8	6.3	10.4	11.2	10.3	40.8	*	5.6	3.6
	ROW %	6.9	4.0	37.6	8.2	10.2	8.5	0.7	0.1	41.8	10.8
	COLUMN %	11.9	11.2	11.2	11.7	12.6	11.6	13.0	7.1	10.3	
EUROPEAN OFFICE	ESTIMATE	3	0	283	163	154	163	0	0	176	825
	% STD ERR	*	0.0	44.3	34.6	40.7	34.6	0.0	0.0	*	28.4
	ROW %	0.5	0.0	45.3	28.1	24.6	28.1	0.0	0.0	28.2	0.2
	COLUMN %	0.0	0.0	0.3	0.8	0.7	0.8	0.0	0.0	0.1	
GREAT LAKES	ESTIMATE	3193	2099	15949	3389	3453	3445	281	54	22558	47838
	% STD ERR	12.0	15.3	5.2	9.3	10.5	9.1	39.4	*	4.0	2.7
	ROW %	8.7	4.4	33.5	7.1	7.2	7.2	0.6	0.1	47.3	17.8
	COLUMN %	19.1	20.6	16.3	16.6	14.8	16.2	16.9	9.8	19.1	
NEW ENGLAND	ESTIMATE	759	419	3584	660	921	677	31	1	4319	9929
	% STD ERR	24.7	32.2	11.3	23.4	19.7	23.1	*	*	9.8	6.5
	ROW %	7.6	4.2	36.1	6.6	9.3	6.8	0.3	0.0	43.5	3.7
	COLUMN %	4.5	4.1	3.7	3.2	3.9	3.2	1.9	0.2	3.7	
NORTHWEST MOUNTAIN	ESTIMATE	1500	751	9794	1723	2497	1758	108	8	14063	28562
	% STD ERR	17.1	25.2	6.7	13.6	12.6	13.4	*	*	5.2	3.7
	ROW %	5.3	2.6	34.3	6.0	8.7	6.2	0.4	0.0	49.2	10.7
	COLUMN %	9.0	7.4	10.0	8.5	10.7	8.3	6.5	1.1	11.9	
SOUTHERN	ESTIMATE	2499	1717	15807	4054	4010	4120	252	180	15070	39844
	% STD ERR	14.4	17.0	5.1	8.2	9.6	8.1	39.4	*	5.1	3.1
	ROW %	6.3	4.3	39.7	10.2	10.1	10.3	0.6	0.5	37.8	14.9
	COLUMN %	14.8	16.8	16.2	19.9	17.2	19.3	15.2	32.5	12.6	

TABLE 2-33

BASE AIRPORT REGION VS. NON-HIERARCHICAL CAPABILITY GROUPS  
(CONTINUED)

PAGE 2 OF 2

1984

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
SOUTHWESTERN	ESTIMATE	2338	1041	15194	4234	4166	4503	325	323	16863	40847
	% STD ERR	14.1	21.3	5.2	7.6	8.8	7.5	37.0	37.2	4.7	3.0
	ROW %	5.7	2.6	37.4	10.4	10.2	11.1	0.8	0.8	41.5	15.2
	COLUMN %	14.0	10.2	15.5	20.8	17.9	21.1	15.6	19.4	14.3	15.2
WESTERN-PACIFIC	ESTIMATE	3244	1870	18879	2483	3101	2763	340	270	19404	46376
	% STD ERR	12.1	16.2	4.6	10.6	11.6	10.2	38.7	45.6	4.3	2.8
	ROW %	7.0	4.0	40.7	5.4	6.7	6.0	0.7	0.6	41.8	17.3
	COLUMN %	19.4	18.3	19.3	12.2	13.3	13.0	16.3	16.2	16.5	17.3
TOTALS	ESTIMATE	16728	10202	97798	20368	23337	21307	2084	1682	117805	267429
	% STD ERR	4.9	6.5	1.3	2.7	3.6	2.7	13.9	15.3	1.0	1.0
	ROW %	6.3	3.8	36.6	7.6	8.7	8.0	0.8	0.6	44.1	17.3
	COLUMN %	19.4	18.3	19.3	12.2	13.3	13.0	16.3	16.2	16.5	17.3

## NON-HIERARCHICAL CAPABILITY GROUPS KEY

GS	-	GLIDE SLOPE
L	-	LOCALIZER
LRN	-	LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA
MB	-	MARKER BEACON
ML	-	MICROWAVE LANDING SYSTEM
RA	-	RADAR ALTITUDE
NO	-	NO REGULATORY AVIONICS

\* - % STANDARD ERROR GREATER THAN 50%

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

## APPENDIX A.1: FIRST MAILING COVER LETTER



US Department  
of Transportation

**Federal Aviation  
Administration**

800 Independence Ave., S.W.  
Washington, D.C. 20591

April 1985

Dear Aircraft Owner:

Enclosed is the annual General Aviation Activity and Avionics Survey for calendar year 1984. Data collected in the survey will be used for performing safety analyses, for determining the demand for air traffic facilities and services, and for assessing the impact of proposed regulatory changes on the general aviation fleet.

The survey of a statistical sample of around 10 percent of all general aviation aircraft is being mailed to owners. Because the sample is random it is possible that more than one of your aircraft may be selected or that your aircraft may be selected in successive years. This may happen in particular when there are a small number of aircraft of the type that you own. When more than one of your aircraft are selected, you will find a separate questionnaire provided for each aircraft. Please answer all questions for the aircraft identified. If you cannot determine precisely an answer to a question, please make your best estimate.

If your aircraft was not in use during the year (e.g., in storage, dismantled, destroyed, exported, etc.) please check item 5, indicating the aircraft was not flown. If the aircraft was sold prior to January 1984, it would be quite helpful if you would write a note indicating this on the survey questionnaire. If your aircraft is operated principally by another (leased, etc.), please obtain the necessary information from the operator or forward these materials to that person or firm for completion.

Please return this questionnaire in the enclosed self-addressed postpaid envelope within 10 days. Because the survey is based on a sample of general aviation aircraft, your response is especially important to the accuracy of the results. A prompt response will eliminate the need for additional follow-up contacts. A high response rate will ensure the continued use of sampling methods to collect activity and avionics data.

The data gathered from this survey will be used only to produce summary statistics and not to disclose individual operations on your aircraft. We appreciate your cooperation.

Sincerely,

Lawrence Kelly  
Manager, Management Standards  
and Statistics Division, AMS-400

Enclosure

## APPENDIX A.2: SECOND MAILING COVER LETTER



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

800 Independence Ave. S.W.  
Washington, D.C. 20591

May 1985

Dear Aircraft Owner:

In April the Federal Aviation Administration sent aircraft owners a questionnaire as part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

You were one of the aircraft owners selected at random to receive a questionnaire. As of this date, we have not received a response from you. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. If you have already responded, please disregard this notice. We appreciate your cooperation.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lawrence E. Kelly".

Lawrence Kelly  
Manager, Management Standards  
and Statistics Division, AMS-400

Enclosure

# APPENDIX A.3: SURVEY QUESTIONNAIRE

<b>1. CONTROL NUMBER</b>	<b>GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY (As of December 31, 1984)</b>	Form Approved OMB NO. 2120-0080										
U.S. Department of Transportation Federal Aviation Administration												
This report is authorized by Section 311 of the Federal Aviation Act of 1958, as amended. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate and timely. Information collected in this survey will be used for statistical purposes only and not to disclose individual aircraft activity.												
2. <input type="checkbox"/> "X" here if you operate your aircraft principally as an air carrier (under FAR 121 or 127). If so, DO NOT complete remainder of form. However, please return to address shown below.												
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>INSTRUCTIONS:</b> Please answer questions for the aircraft identified at right. Mail the completed questionnaire in the enclosed postage paid envelope to</p> </div> <div style="width: 50%; text-align: right;"> <p><b>3. AIRCRAFT CHARACTERISTICS</b></p> <p style="font-size: 2em;">N</p> <p>Transportation Systems Center—GAF Kendall Square Cambridge, Massachusetts 02142</p> </div> </div>												
<b>4. What were the total lifetime airframe hours as of December 31, 1984?</b>	HOURS	<b>5. In Calendar Year 1984, what percentage of the flying time for this aircraft was flown in each of the following conditions? (a, b, c, and d should add to 100%.)</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Instrument Meteorological Condition (IMC) Day</td> <td style="width: 20%; text-align: center;">a.</td> </tr> <tr> <td>Instrument Meteorological Condition (IMC) Night</td> <td style="text-align: center;">b.</td> </tr> <tr> <td>Visual Meteorological Condition (VMC) Day</td> <td style="text-align: center;">c.</td> </tr> <tr> <td>Visual Meteorological Condition (VMC) Night</td> <td style="text-align: center;">d.</td> </tr> <tr> <td><b>TOTAL</b></td> <td></td> </tr> </table>	Instrument Meteorological Condition (IMC) Day	a.	Instrument Meteorological Condition (IMC) Night	b.	Visual Meteorological Condition (VMC) Day	c.	Visual Meteorological Condition (VMC) Night	d.	<b>TOTAL</b>	
Instrument Meteorological Condition (IMC) Day	a.											
Instrument Meteorological Condition (IMC) Night	b.											
Visual Meteorological Condition (VMC) Day	c.											
Visual Meteorological Condition (VMC) Night	d.											
<b>TOTAL</b>												
<b>6. Was aircraft flown in Calendar Year 1984? (Check one)</b> 1. <input type="checkbox"/> Yes    2. <input type="checkbox"/> No (Skip to question 11)		<b>9. Was this aircraft flown on an Instrument Flight Plan in 1984?</b> 1. <input type="checkbox"/> Yes    2. <input type="checkbox"/> No If "Yes," how many hours were flown on an Instrument Flight Plan?										
<b>7. How many hours did this aircraft fly in each of the categories below during Calendar Year 1984?</b>	HOURS	<b>10. What was this aircraft's average rate of fuel consumption (gal./hr.) during 1984? (Report whole gals. only)</b>										
<b>EXECUTIVE/CORPORATE TRANSPORTATION</b> -Company flying with a professional crew transporting company personnel, guests, and cargo ..... a.		<b>11. In what state (Abbreviation) or foreign country was this aircraft based as of December 31, 1984?</b>										
<b>BUSINESS TRANSPORTATION</b> -Individual use of an aircraft for business transportation ..... b.		<b>12. AVIONICS EQUIPMENT CAPABILITY</b> ("X" ALL boxes that reflect this aircraft's current capability. If none, check the last box in each group.)										
<b>PERSONAL</b> -Individual flying for personal reasons ..... c.		<b>VHF COMMUNICATIONS EQUIPMENT</b> VHF Communications System: 360 Channels or less ..... a. 720 Channels or more ..... b. More than one Communications System ..... c. No VHF Communications Equipment ..... d.										
<b>INSTRUCTIONAL</b> -Flying with or under the supervision of a flight instructor (excludes proficiency flying) ..... d.		<b>TRANSPONDER EQUIPMENT</b> 4096 Code ..... e. Altitude Encoding Equipment ..... f. No Transponder Equipment ..... g.										
<b>AERIAL APPLICATION</b> -Agriculture, health, forestry, cloud seeding, firefighting, insect control, etc. .... e.		<b>NAVIGATION EQUIPMENT</b> VOR Receiver: 100 Channels ..... h. 200 Channels ..... i. More Than One VOR Receiver ..... j. Automatic Direction Finder (ADF) ..... k. Distance Measuring Equipment (DME) ..... l. Area Navigation Equipment (RNAV) ..... m. Long Range Navigation Equipment: LORAN C ..... n. OMEGA-VLE ..... o. Other (Doppler, INS, Other) ..... p. Radar Altimeter ..... q. Flight Director ..... r. Flight Management Computer ..... s. Weather Radar ..... t. No Navigation Equipment ..... u.										
<b>AERIAL OBSERVATION</b> -Aerial mapping/photography, survey, patrol, fish spotting, search and rescue, hunting, highway traffic advisory, sightseeing (not Part 135), etc. .... f.		<b>ILS RECEIVING EQUIPMENT</b> Localizer ..... v. Marker Beacon ..... w. Glide Slope ..... x. Microwave Landing System ..... y. No ILS Receiving Equipment ..... z.										
<b>OTHER WORK USE</b> -Construction work (not part 135), helicopter hoist, aerial advertising, towing gliders, parachuting, etc. .... g.												
<b>COMMUTER AIR CARRIER</b> -Performs at least five scheduled round trips per week between two or more points or carries mail ..... h.												
<b>DEMAND AIR TAXI</b> -All Part 135 passenger and cargo operations, including charter and excluding commuter air carrier ..... i.												
<b>OTHER</b> -Experimentation, R & D, testing, demonstrations, government, air shows, air racing, etc. .... j.												
<b>AIRCRAFT RENTAL BUSINESS</b> -Commercial flying club, leased and rental aircraft activity. (If you know the purpose of flight, assign hours to categories above. If not, enter hours here) ..... k.												



## **APPENDIX B SAMPLE DESIGN**

### **B.1 SAMPLE FRAME AND SIZE**

The Aircraft Registration Master File, maintained by the FAA Mike Monroney Aeronautical Center in Oklahoma City, provided the sample frame, the list of aircraft from which the sample was selected, for the survey. This file is the official record of registered civil aircraft in the U.S., containing one record per aircraft.

Between the 1977 and 1978 survey cycles several changes occurred to this file which had an impact on the sample population and frame, and ultimately on the survey results. In January 1978, FAA implemented a new procedure for maintaining the file, known as triennial revalidation. Instead of requiring all owners to revalidate and update their aircraft registration annually, FAA required revalidation for only those owners who had not contacted the registry for 3 years. The less frequent updating affected the accuracy of the file and its representativeness. Two major consequences for the survey results are discussed below:

- 1) The accuracy of owners' addresses deteriorated, causing the percentage of questionnaires returned by the post office to almost triple from 1977 to 1982. This partially accounted for the lower survey response rates experienced since 1977.
- 2) The file contained a residue of aircraft which under the old revalidation system would have been deregistered and purged from the file, but remained under the new system. Consequently, the population counts were inflated resulting in artificially large increases in the estimates of the number of active general aviation aircraft from 1977 to 1978, and from 1978 to 1979.

Also during this period the entire Aircraft Registration System was installed on a new computer system. At the same time, FAA modified many of the updating and processing procedures. It is quite possible that these changes affected the registration file, although it is not known in what way.

Finally, new legislation required two categories of aircraft, formerly ineligible, to be registered with the U.S. Registry, namely:

- 1) aircraft owned by individual citizens of foreign countries who are permanent residents of the U.S., and
- 2) aircraft owned by non-U.S. corporations which are organized and doing business under U.S. law as long as the aircraft are based and used primarily in the U.S.

The definition of a registered general aviation aircraft changed from 1977 to 1978 to include the two new groups. It is estimated that these aircraft comprise less than one half percent of the general aviation fleet.

Thus, these changes discussed above affected the contents of the Aircraft Registration Master File and consequently the survey results. While it is difficult

to quantify the effects of the changes, FAA estimates that they caused the survey results to overestimate population and hours flown by not more than five percent.

All aircraft identified as general aviation in the file according to the definition in Section 1.2.1 comprise the sample frame with the following exceptions:

- 1) Aircraft registered to dealers.
- 2) Aircraft with "Sale Reported" or "Registration Pending" appearing in the record instead of the owner's name.
- 3) Aircraft with a known inaccurate owner's address.
- 4) Aircraft with missing state of registration, aircraft make-model-series code, or aircraft type information.

For calendar year 1984, the sample frame consisted of 267,429 general aviation aircraft records from which 33,996 records were sampled, yielding a 12.7 percent sample. Table B-1 and Figure B.1 show the distribution of the sample compared to that of the population by aircraft type. Table B-2 and Figure B.2 show similar distributions by FAA region. (See Appendix C for the FAA regional map.) These displays clearly demonstrate the disproportionality of the sample to the population, an intended result of the sample design to gain efficiency and to control errors.

## **B.2 DESCRIPTION OF SAMPLE DESIGN**

The sample design employed was a stratified, systematic design from a random start. The sample was selected from a two-way stratified frame matrix. The two stratification criteria were:

- 1) State or territory of aircraft registration.
- 2) A variable called the make-model index constructed from a combination of the computed aircraft type and the Service Difficulty Reporting (SDR) aircraft manufacturer/model group.

The 54 levels of the state criterion and the 375 levels of the make-model index yielded a matrix of 54 by 375 or 20,250 cells (strata) among which the frame was divided for sampling.

The FAA's primary requirement was for estimates of mean annual flight hours per aircraft, necessitating optimal determination of sample sizes based on flight hour variation by state and by make-model index, and not on population. Hence, the sample was not proportional to size, and a sampling fraction was determined for each cell with a non-zero population. Sampling was then performed systematically from a random start within individual cells, yielding a final sample size of 33,996 general aviation aircraft.

Initially, each aircraft in the sample was given a weight which was the inverse of its cell's sampling fraction, and which corresponded to the number of aircraft in

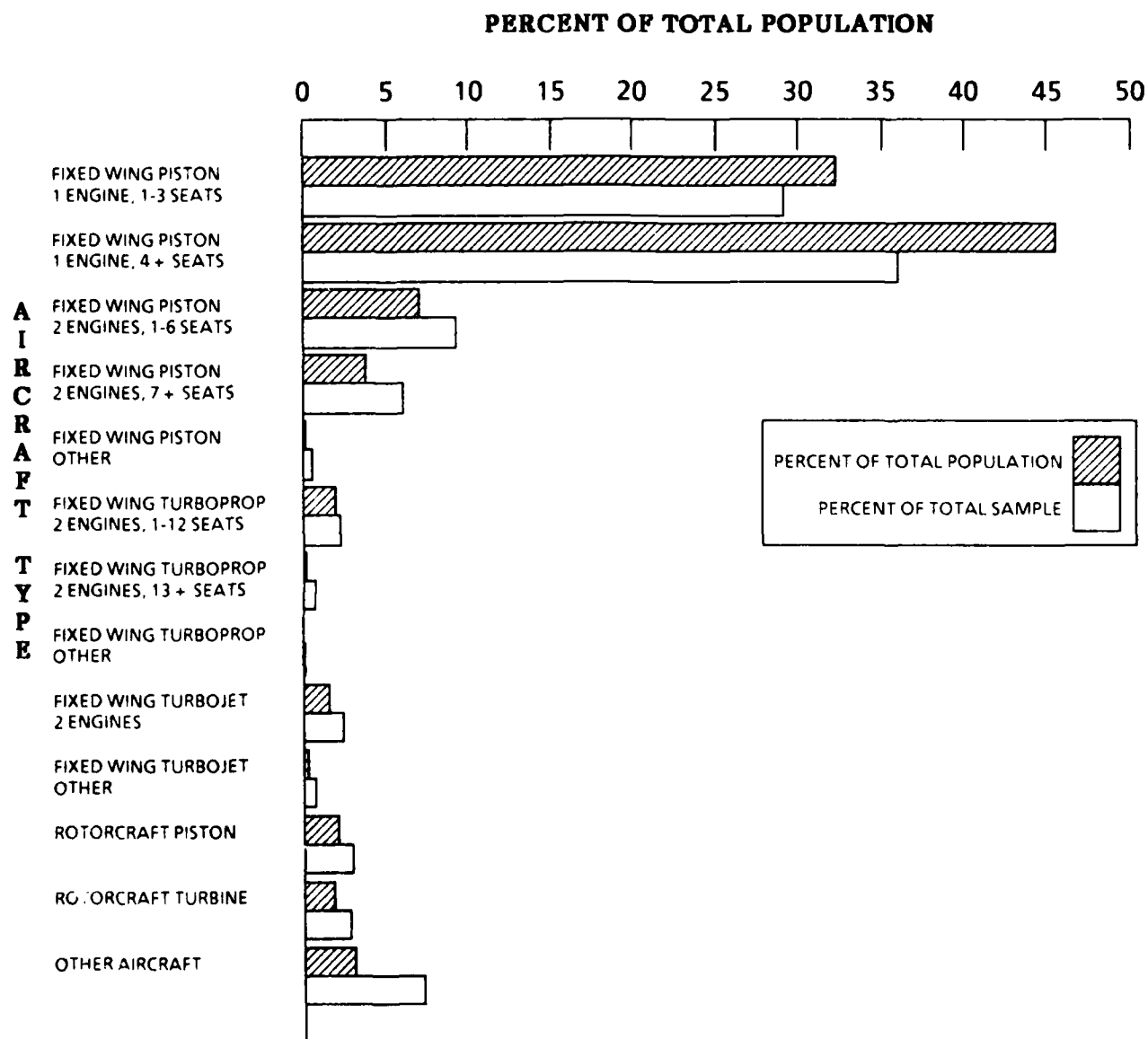
**TABLE B-1. SAMPLE AND POPULATION DISTRIBUTIONS BY AIRCRAFT TYPE**

TYPE	POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Fixed Wing			
<u>Piston</u>			
1 engine, 1 - 3 seats	86,532	9,919	11.5
1 engine, 4+ seats	121,984	12,228	10.0
2 engines, 1 - 6 seats	18,930	3,170	16.8
2 engines, 7+ seats	10,180	2,077	20.4
Other Piston	392	165	42.1
<u>Turboprop</u>			
2 engines, 1-12 seats	5,131	753	14.7
2 engines, 13+ seats	691	219	31.7
Other Turboprop	195	46	23.6
<u>Turbojet</u>			
2 engines	3,946	767	19.4
Other Turbojet	900	204	22.7
Rotorcraft			
Piston	5,516	996	18.1
Turbine	4,774	936	19.6
Other	8,259	2,516	30.5
<b>TOTAL</b>	<b>267,429</b>	<b>33,996</b>	<b>12.7</b>

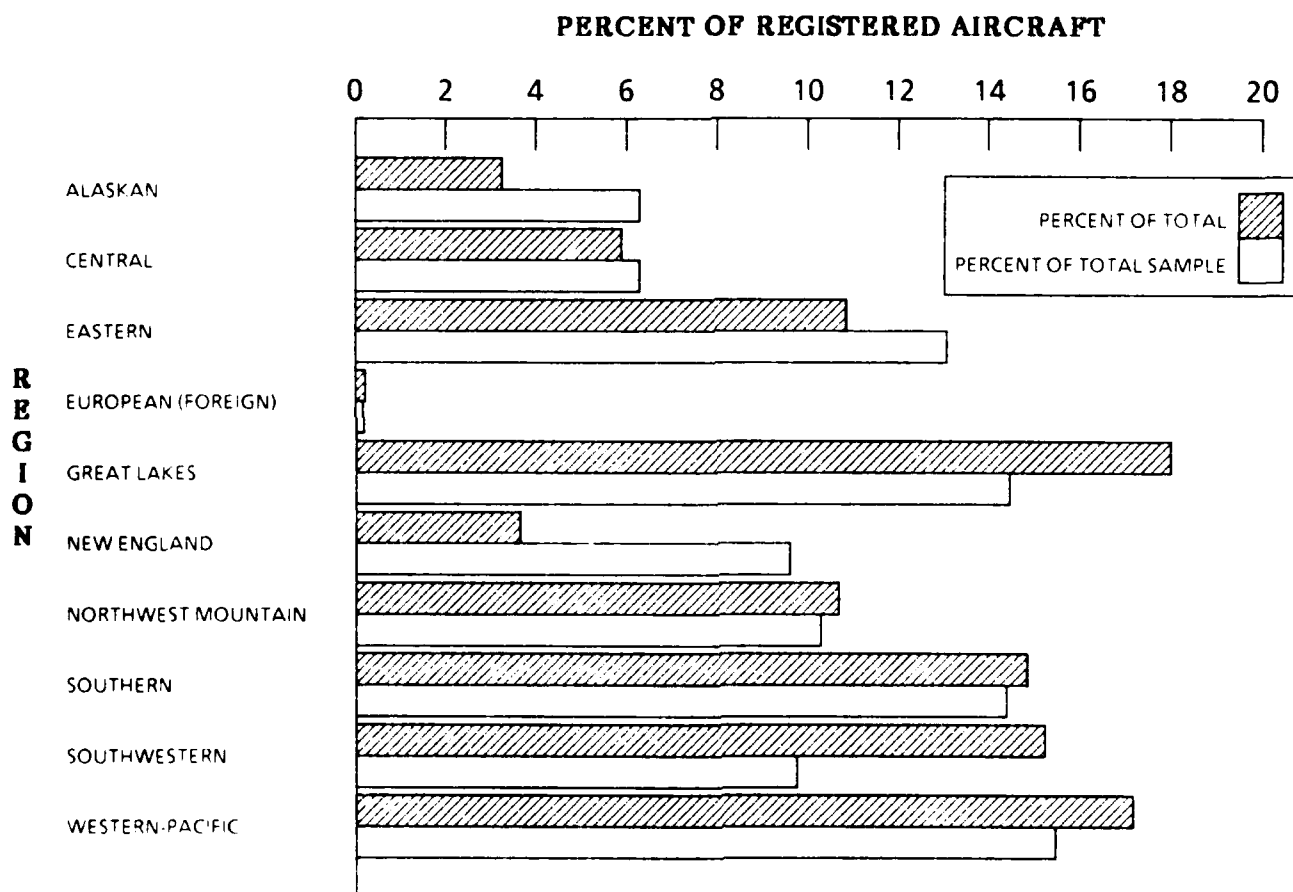
**TABLE B-2. SAMPLE AND POPULATION DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT**

REGION	APPROXIMATE POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Alaskan	8,741	2,142	24.5
Central	15,836	2,140	13.5
Eastern	29,092	4,451	15.3
European (Foreign)	618	68	11.0
Great Lakes	47,854	4,930	10.3
New England	9,860	3,255	33.0
Northwest Mountain	28,544	3,505	12.3
Southern	39,907	4,910	12.3
Southwestern	40,935	3,333	8.1
Western-Pacific	46,037	5,262	11.4
<b>TOTAL</b>	<b>267,429</b>	<b>33,996</b>	<b>12.7</b>

Note: Column summations may differ from printed totals due to estimation procedures.



**FIGURE B.1. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY AIRCRAFT TYPE**



**FIGURE B.2. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTION  
BY REGION OF REGISTERED AIRCRAFT**

the sample frame represented by that aircraft. When all responses to the survey were tallied, each weight was adjusted according to the response rate for the cell, counting an aircraft for which no survey questions were answered as a non-respondent and an aircraft for which at least one question was answered as a respondent. The weight adjustment is described below:

- 1) Non-respondents' weights were changed to zero.
- 2) The weights of all responding aircraft were adjusted uniformly by dividing the initial weight by the response rate for the cell.

This method of weight adjustment has several attributes. It actually incorporates the response rates into the final weights and simplifies estimation procedures.

### **B.3 ERROR**

Errors associated with estimates derived from sample survey results fall into two categories: sampling and non-sampling errors.<sup>1</sup> Sampling errors occur because the estimates are based on a sample -- not the entire population. Non-sampling errors arise from a number of sources such as non-response, inability or unwillingness of respondents to provide correct information, differences in interpretation of questions, mistakes in recording or coding the data obtained, and others. The following sections discuss the two types of errors.

#### **B.3.1 Sampling Error**

In a designed survey, the sampling error associated with an estimate is generally unknown, but a measurable quantity known as the standard error is often used as a guide to the magnitude of sampling error. The standard error measures the variation which would occur among the estimates from all possible samples of the same design from the same population. It thus measures the precision with which an estimate approximates the average result of all possible samples or the result of a survey in which all elements of the population were sampled.

Through sample design techniques, the statistician can control the sizes of standard errors on a few key variables, known as design variables, in the survey. In the General Aviation Activity and Avionics Survey, the design variables were the mean annual hours flown per aircraft by aircraft type, by aircraft manufacturer/model characteristics, and by state of aircraft registration. The sample was designed to produce standard errors on these variables at levels specified by the FAA. No controls were placed on the standard errors of the non-design variables.

Thus, every estimate resulting from a sample survey, whether it be for a design or non-design variable, has sampling error associated with it. The user of survey results must consider this error along with the point estimate itself when making inferences or drawing conclusions about the sample population. A large standard error relative to an estimate indicates lack of precision and, inversely, a small standard error indicates precision. To facilitate the comparison of estimates and their errors, the tables in Section 2 of this publication display standard errors for

<sup>1</sup>Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, (Washington, DC, 1974), pp. 11-14.

all estimated quantities. In some cases, the tables contain the percent standard error, which is the standard error multiplied by 100 divided by the corresponding estimate. The paragraphs below explain the proper interpretation and use of the errors.

An estimate and its standard error make it possible to construct an interval estimate with prescribed confidence that the interval will include the average value of the estimate from all possible samples of the population. Table B-3 below shows selected interval widths and their corresponding confidence.

**TABLE B-3. CONFIDENCE OF INTERVAL ESTIMATES**

WIDTH OF INTERVAL	APPROXIMATE CONFIDENCE THAT INTERVAL INCLUDES AVERAGE VALUE
1 Standard error	68%
2 Standard errors	95%
3 Standard errors	99%

As an example, from Table 2-6 a 95 percent confidence interval for the number of active rotorcraft with piston engines would be  $2936 \pm 2(185)$  or (2566, 3306). One would say that the number of active rotorcraft with piston engines lies somewhere between 2566 and 3306 with 95 percent confidence.

### B.3.2 Non-Sampling Error

Non-sampling error can be reduced through survey design, although the amount of reduction is difficult, if not impossible, to quantify in any given design. Nevertheless, through controlled experiments, various techniques have been identified which limit non-sampling error. Several of these techniques were incorporated into the design of the general aviation survey and are itemized below:

- A second mailing to non-respondents was conducted in addition to the original mailing to improve the response rate, since a low response rate is a major cause of non-sampling error. A total of 59.5 percent of those aircraft sampled responded to a least one question of the survey. The 1984 rate marks a decline over the 80 percent response achieved in 1977, the first year of the survey. Possible causes of the decrease include:
  - 1) The deterioration of the currency of aircraft owners' addresses in the Aircraft Registration Master File, the sample frame. This caused a gradual increase in the percentage of questionnaires returned undelivered by the postmaster from around 1.6 percent in 1977 to 6.8 percent in 1981, hence decreasing the response rate. The percentage of post-master returns for 1984 (5.9%) shows a slight decline from the 1981 level, but is still significantly higher than in 1977.

- 2) Repeated sampling of aircraft in 2 and possibly 3 or 4 successive years. Due to the design of the sample to achieve specified precision in estimates for states and manufacturer/model groups of aircraft, it is impossible to avoid sampling some of the same aircraft in consecutive years. Owners of such aircraft may have been less willing to respond in 1984 than in previous years.

Tables B-4 and B-5 show the response rates broken down by FAA region and aircraft type, respectively. The lowest response rate for any region was 44.1 percent for the European (Foreign) region due to mail delivery difficulties. The Alaskan Region rate was low at 49.7 percent for similar reasons. These two regions together, however, represented only about 3.5 percent of the U.S. general aviation fleet. Three aircraft types had response rates of less than 50 percent, fixed wing twin engine piston aircraft with seven or more seats, the other fixed wing turboprop group, and the rotorcraft turbine group. These three groups, however, represent only 5.7 percent of the fleet.

- The survey questionnaire was designed and tested to minimize misinterpretation of questions by the aircraft owners.
- To assure the owners of the confidentiality of their responses, the questionnaire cover letter informed them that the intended use of the responses was "only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records."<sup>1</sup>
- Comprehensive editing procedures insured the accuracy of the data transcription to machine readable form and the internal consistency of responses.
- The official and most accurate source of information available on the general aviation fleet, the FAA Aircraft Registration Master File, was used as the sampling frame.

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<sup>1</sup>See Appendix A.1.



**TABLE B-4. RESPONSE RATES BY REGION**

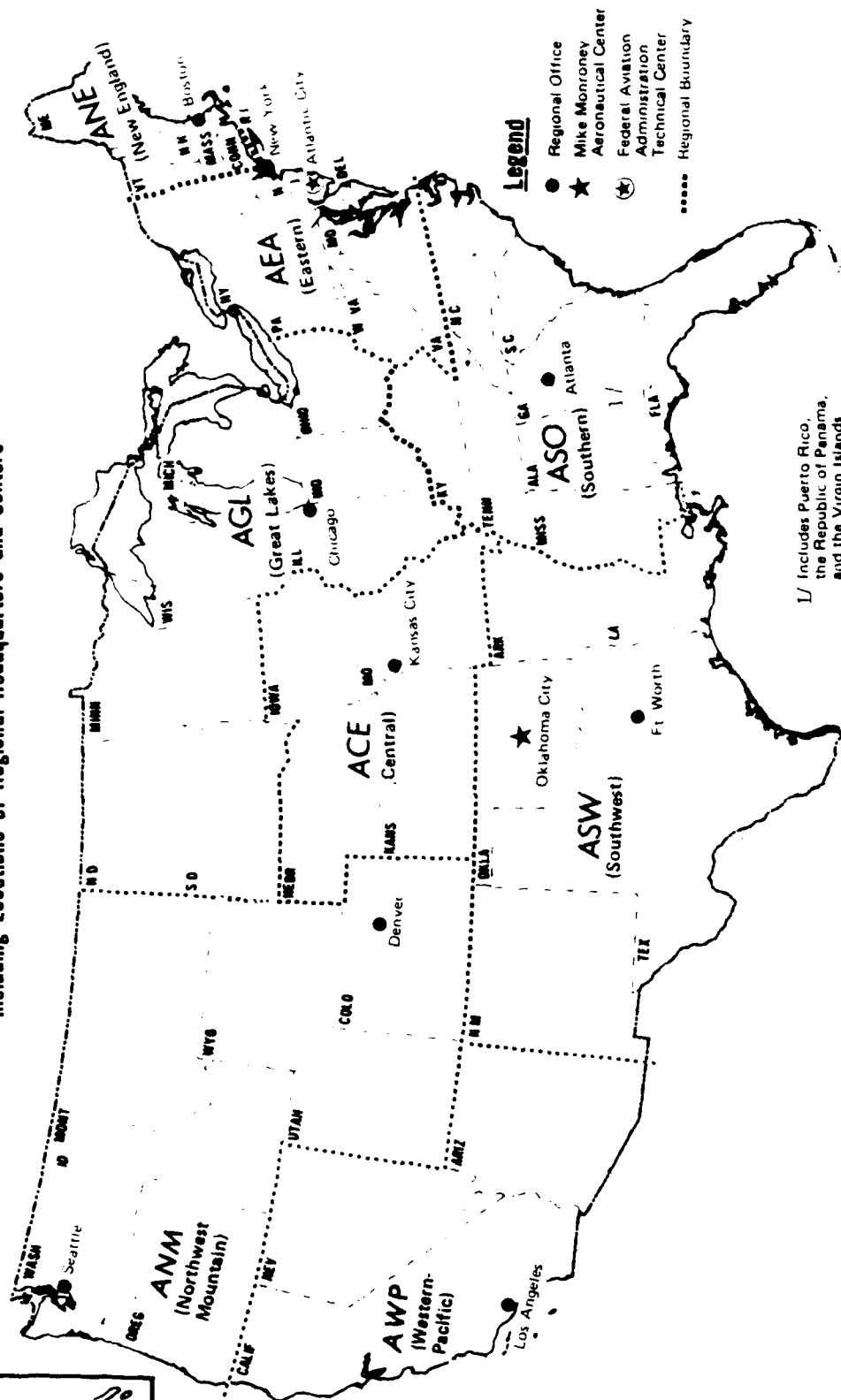
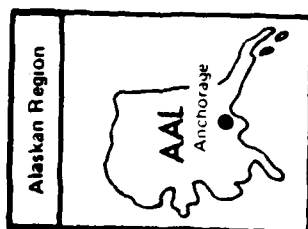
REGION	RESPONSE RATE (%)	REGION	RESPONSE RATE (%)
Alaskan	49.7	New England	63.1
Central	66.0	Northwest Mountain	57.9
Eastern	59.4	Southern	56.6
European (Foreign)	44.1	Southwestern	57.6
Great Lakes	65.0	Western-Pacific	58.4
		<hr/> TOTAL	<hr/> 59.5

**TABLE B-5. RESPONSE RATES BY AIRCRAFT TYPE**

AIRCRAFT TYPE	RESPONSE RATE (%)	AIRCRAFT TYPE	RESPONSE RATE (%)
Fixed Wing			
Piston		Turbojet	
1 engine, 1-3 seats	64.1	2 engines	62.3
1 engine, 4+ seats	60.2	Other	52.5
2 engines, 1-6 seats	56.0		
2 engines, 7+ seats	46.8	Rotorcraft	
Other	52.1	Piston	54.7
Turboprop		Turbine	49.9
2 engines, 1-12 seats	60.7		
2 engines, 13+ seats	53.0	Other	58.4
Other	47.8	<hr/> TOTAL	<hr/> 59.5

# APPENDIX C: FAA REGIONAL BOUNDARIES

## U.S. DEPARTMENT OF TRANSPORTATION Federal Aviation Administration FAA REGIONAL BOUNDARIES Including Locations of Regional Headquarters and Centers



**APPENDIX D**  
**SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES**

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) AIRCRAFT GROUP NAMES AND THE FAA AIRCRAFT MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN SEVERAL OF THE TABLES IN THE BODY OF THIS REPORT.

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA
ADAMS A50S	050101	AMTR 850	566042	ARONCA85	190802
ADAMS A50S	050103	AMTR A4C	710110	ARONCA85	190902
ADAMS A50S	050105	AMTR AA4	5637P8	ARONCA85	190906
ADAMS AB	050100	AMTR AN1	0401RZ	ARONCA85	190908
ADAMSTT11	950104	AMTR AOP	881210	ARONCA85	190910
AERORSJ2	500604	AMTR B	564405	ARONCA85	190914
AEROSP282	380502	AMTR B10	566605	ARONCA85	190918
AEROSP282	380524	AMTR BIPE	5601ZE	ARONCA85	191014
AEROSP282	380526	AMTR C2	563781	ARONCA85	191016
AEROSP601	680661	AMTR DK1	564406	ARONCAC2	190102
AEROSPAS355	680810	AMTR EASY2	563804	ARONCAC2	190104
AEROSPAS316	680207	AMTR H2	301806	ARONCAC3	190302
AEROSPAS316	680515	AMTR HP11	564752	ARONCAF	190702
AEROSPAS316	680605	AMTR HUMMER	564475	ARONCALB	190804
AEROSPAS318	680607	AMTR JM101	5601UN	ARONCALC	190808
AEROSPAS316	680615	AMTR KV3	560887	ARONCAM	190504
AEROSPAS360	680662	AMTR LGTHZR	564573	AUGSBGK1680	020101
AEROSPAS365	680669	AMTR P51X	690462	AUGSBK630	5604MR
AERPEGM100S	200506	AMTR QCKSLV	5655P4	AVIANWCLIPPR	900108
AERSPC377	160208	AMTR REPDGA	566171	AVIANWFALCON	900102
AETNA 2SA	220102	AMTR RICE	5601YQ	AVIANWSKYHWK	900104
AGUSTA A109	280109	AMTR RS15	5647AL	AYRES S2	143006
AGUSTA208AGS	280301	AMTR S14	566157	AYRES S2	143010
AIR&SPACE 18	440104	AMTR SCMFRT	56134R	AYRES S2	143012
AIRBLDPRNCX	320102	AMTR SHARK	564522	AYRES S2	143022
AIRBUS300	930104	AMTR SNOOP2	56130Z	AYRES S2	970100
AIRBUS300	930106	AMTR SPAD7	5608A7	AYRES S2	970101
AIRBUS300	930306	AMTR SPTBPL	565501	AYRES S2	970105
AIRMECA1	400102	AMTR TMK	220120	AYRES S2	970106
AIRMECA1	400106	AMTR TRPBRD	561338	AYRES S2	970107
AIRMECA1	400108	AMTR VAN	561383	AYRES S2	970202
AIRMECA1	400113	AMTR WDE	56013R	AYRES S2	970210
AIRMECA1	400302	AMTR ZIA	130240	AYRES S2	970215
AIRPTSA	144202	AMTR ZUNI	130202	AYRES S2	830202
AIRPTSA	144204	AMTR ZUNI	130230	AYRES S2	630203
AIRPTSA	144206	AMTRBSCONCPT	240104	AYRES S2	630303
AIRPTSA	850102	AMTRDNBD2	5601GX	AYRES S2	380202
AIRPTSA	850104	AMTRPIAX3	5604T4	AYRES S2	380204
AIRPTSA	850106	AMTRPIAX3	5604T8	AYRES S2	380206
AIRPTSA	850108	AMTRPIAX3	5604UQ	AYRES S2	380302
AIRPTSA	850110	AMTRPIAX3	5637C2	AYRES S2	380306
AIRPTSA	850112	AMTRPIAX3	5637C9	BAC 111	480202
AIRPTSA	850114	AMTRPIAX3	001213	BAC 111	480204
AIRPTSA	850118	AMTRSAPLAYBY	6502M1	BAC 111	480208
AIRPTSA	850120	AMTRWTDFA	7901B1	BAC 111	480210
AIRPTSA	850122	AMTRXPCUBEAA	5611B6	BAC 111	480218
AIRPTSA	570620	ANDGRN14	740102	BAC 111	480268
AIRPTSA	570624	ARACFTSPORT	840102	BAC 111	480273
AIRTRCAT300	390101	ARACFTSPORT	840110	BAC 111	480277
AIRTRCAT300	390103	ARCTICS1A	850202	BAC 111	480283
AIRTRCAT300	390104	ARCTICS1A	850204	BAG B206	121223
AIRTRCAT400	390202	ARCTICS1A	850206	BAG B206	121224
AIRTRCAT400	390203	ARCTICS1A	850208	BAG DH125	230170
ALCAIRARGO	530102	ARCTICS1A	850210	BALWKSFIREFY	050100
AMD FALC10	730101	ARCTICS1A	850212	BALWKSFIREFY	050101
AMD FALC20	720302	ARCTICS1A	850216	BALWKSFIREFY	050103
AMD FALC20	720304	ARCTICS1B1	850302	BALWKSFIREFY	050104
AMD FALC20	720305	ARCTICS1B1	850308	BALWKSFIREFY	050107
AMD FALC20	720306	ARCTICS1B2	850303	BALWKSFIREFY	050109
AMD FALC20	730103	ARMWHT850101	820122	BALWKSFIREFY	0501A9
AMD FALC50	730106	AROCARAROCAR	100102	BARNADD01	030104
AMEGLEEAGLET	650102	AROCARAROCAR	100104	BARTLTLC13	050102
AMEGLEEAGLET	650104	ARONCA15	191202	BBAVIA11	191102
AMEGLEEAGLET	650106	ARONCA15	191204	BBAVIA11	191104
AMEGLEEAGLET	650108	ARONCA58	191002	BBAVIA11	191106
AMERANS56	580104	ARONCA58	191006	BBAVIA11	191112
AMERAPPILGRM	620104	ARONCA58	191008	BBAVIA11	140404
AMTR 3A	5601BP	ARONCA58	191010	BBAVIA402	110204

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BBAVIA7	110102	BEECH 18	151042	BEECH 45	152008
BBAVIA7	110108	BEECH 18	151044	BEECH 45	152010
BBAVIA7	110108	BEECH 1900	154180	BEECH 45	152012
BBAVIA7	110118	BEECH 1900	154181	BEECH 45	152013
BBAVIA7	110120	BEECH 200	152920	BEECH 45	152014
BBAVIA7	110124	BEECH 200	152921	BEECH 50	152502
BBAVIA7	110128	BEECH 200	152922	BEECH 50	152508
BBAVIA7	110130	BEECH 200	152924	BEECH 50	152510
BBAVIA7	1101MW	BEECH 200	152928	BEECH 50	152512
BBAVIA7	1101N8	BEECH 200	152928	BEECH 50	152518
BBAVIA7	1101NG	BEECH 23	151202	BEECH 50	152518
BBAVIA7	1101NN	BEECH 23	151204	BEECH 50	152520
BBAVIA7	1101NS	BEECH 23	151208	BEECH 50	152522
BBAVIA7	1101F3	BEECH 23	151212	BEECH 50	152524
BBAVIA7	1101PH	BEECH 23	151214	BEECH 50	152530
BBAVIA7	1101PK	BEECH 23	151216	BEECH 50	152532
BBAVIA7	1101PN	BEECH 23	151218	BEECH 50	152534
BBAVIA7	1101PT	BEECH 23	151228	BEECH 50	152538
BBAVIA7	1101PY	BEECH 23	151240	BEECH 55	152702
BBAVIA8	220803	BEECH 23	151242	BEECH 55	152704
BBAVIA8	110812	BEECH 23	151250	BEECH 55	152708
BCRAFTHB	110102	BEECH 23	151252	BEECH 55	152708
BEAGLE121	120424	BEECH 23	151253	BEECH 55	152729
BEAGLE121	120425	BEECH 23	151254	BEECH 55	152730
BEECH 100	152915	BEECH 300	152930	BEECH 55	152732
BEECH 100	152918	BEECH 33	151402	BEECH 58	152738
BEECH 100	152919	BEECH 33	151404	BEECH 58	152738
BEECH 17	150504	BEECH 33	151408	BEECH 58	152740
BEECH 17	150508	BEECH 33	151408	BEECH 58	152744
BEECH 17	150512	BEECH 33	151410	BEECH 58	152748
BEECH 17	150518	BEECH 33	151422	BEECH 60	153802
BEECH 17	150524	BEECH 33	151423	BEECH 60	153804
BEECH 17	150534	BEECH 33	151424	BEECH 60	153805
BEECH 17	150538	BEECH 33	151425	BEECH 65	152802
BEECH 17	150550	BEECH 33	151432	BEECH 65	152803
BEECH 17	150554	BEECH 33	151434	BEECH 65	152805
BEECH 17	150556	BEECH 33	151435	BEECH 76	153005
BEECH 17	150558	BEECH 35	151502	BEECH 77	153007
BEECH 17	150564	BEECH 35	151504	BEECH 80	152808
BEECH 18	150202	BEECH 35	151508	BEECH 80	152807
BEECH 18	150204	BEECH 35	151508	BEECH 80	152808
BEECH 18	150702	BEECH 35	151510	BEECH 80	152809
BEECH 18	150902	BEECH 35	151512	BEECH 80	152812
BEECH 18	150904	BEECH 35	151514	BEECH 90	152908
BEECH 18	150909	BEECH 35	151516	BEECH 90	152909
BEECH 18	150911	BEECH 35	151518	BEECH 90	152912
BEECH 18	150913	BEECH 35	151520	BEECH 90	152913
BEECH 18	151001	BEECH 35	151522	BEECH 90	152914
BEECH 18	151004	BEECH 35	151524	BEECH 95	153402
BEECH 18	151008	BEECH 35	151526	BEECH 95	153404
BEECH 18	151007	BEECH 35	151528	BEECH 95	153408
BEECH 18	151008	BEECH 35	151530	BEECH 95	153408
BEECH 18	151010	BEECH 35	151532	BEECH 95	153410
BEECH 18	151011	BEECH 35	151538	BEECH 99	154002
BEECH 18	151012	BEECH 35	151540	BEECH 99	154003
BEECH 18	151013	BEECH 35	151544	BEECH 99	154004
BEECH 18	151014	BEECH 35	151546	BEECH 99	154008
BEECH 18	151018	BEECH 35	151548	BELL 206	181579
BEECH 18	151018	BEECH 38	151602	BELL 214	182100
BEECH 18	151019	BEECH 38	151603	BELL 214	182105
BEECH 18	151020	BEECH 38	151604	BELL 222	182124
BEECH 18	151021	BEECH 38	151605	BELL 222	182140
BEECH 18	151022	BEECH 38	151608	BELL 47	180802
BEECH 18	151023	BEECH 38	151607	BELL 47	180804
BEECH 18	151024	BEECH 38	151609	BELL 47	180808
BEECH 18	151026	BEECH 45	152002	BELL 47	180702
BEECH 18	151040	BEECH 45	152008	BELL 47	180802

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BELL 47	180813	BLANCA51	225051	BOEING707	38365H
BELL 47	181002	BLANCA7	220438	BOEING707	38365K
BELL 47	181008	BLANCA7	220480	BOEING707	38366B
BELL 47	181011	BLANCA7	220501	BOEING707	38366C
BELL 47	181012	BLANCA7	220801	BOEING707	38366F
BELL 47	181014	BLANCA7	220701	BOEING707	38366H
BELL 47	181024	BLANCA7	110104	BOEING707	38367B
BELL 47	181025	BLANCA7	110110	BOEING707	38367C
BELL 47	181028	BLANCA7	110112	BOEING707	38367D
BELL 47	181028	BLANCA7	110114	BOEING707	38367F
BELL 47	181029	BLANCA7	110122	BOEING707	38367G
BELL 47	181030	BLANCA7	110138	BOEING707	38367M
BELL 47	181031	BLANCA7	110140	BOEING707	38367N
BELL 47	181032	BLANCA7	110144	BOEING707	38367S
BELL 47	181034	BLANCA7	110148	BOEING707	38368D
BELL 47	181102	BLANCA7	110150	BOEING707	38368H
BELL 47	181104	BLANCA7	110154	BOEING720	383810
BELL 47	181106	BLANCA7	110158	BOEING720	383818
BELL 47	181202	BLANCA7	110182	BOEING720	383822
BELL P83	180202	BLANCA7	110184	BOEING720	383828
BELL P83	180204	BLANCA7	110188	BOEING720	383830
BELL 204	181402	BLANCA7	110188	BOEING720	383857
BELL 204	181404	BLANCA7	110170	BOEING720	383869
BELL 205	181414	BLANCA7	110172	BOEING720	383877
BELL 208	181502	BLANCA7	1101MA	BOEING727	384002
BELL 208	181508	BLANCA7	1101ML	BOEING727	384003
BELL 208	181508	BLANCA7	1101N2	BOEING727	384004
BELL 208	181511	BLANCA7	1101N7	BOEING727	384006
BELL 208	181522	BLANCA7	1101NB	BOEING727	384008
BELL 208	182107	BLANCA7	1101NM	BOEING727	38400C
BELL 208	182108	BLANCA7	1101NX	BOEING727	38400E
BELL 212	181420	BLANCA7	1101PC	BOEING727	38400F
BELL 214ST	182108	BLANCA8	220801	BOEING727	38400H
BELL 222	182122	BLANCAPACMKR	200202	BOEING727	38400K
BELL 412	182202	BLANCAPACMKR	200702	BOEING727	384010
BIMONDCB1	370152	BLANCASKYRKT	200402	BOEING727	384012
BLANCA11	191110	BLANCASKYRKT	200802	BOEING727	384014
BLANCA1412	200902	BNORM BN2	520202	BOEING727	384016
BLANCA1413	201002	BNORM BN2	520204	BOEING727	384017
BLANCA1413	201004	BNORM BN2	520205	BOEING727	384030
BLANCA1413	201008	BNORM BN2	520207	BOEING727	384035
BLANCA1419	220402	BNORM BN2	520209	BOEING727	384036
BLANCA1419	220404	BNORM BN2	520210	BOEING727	384058
BLANCA1419	220406	BNORM BN2	520215	BOEING727	384063
BLANCA1419	220408	BNORM BN2	520220	BOEING727	384073
BLANCA1419	080102	BNORM BN2	520221	BOEING727	384074
BLANCA1419	080104	BNORM BN2	520228	BOEING727	384075
BLANCA1419	080106	BNORM BN2	520227	BOEING727	384076
BLANCA1419	080108	BNORM BN2	520302	BOEING727	384077
BLANCA1419	080112	BNORM BN2	520350	BOEING727	384078
BLANCA1419	080114	BNORM BN2	080221	BOEING727	384079
BLANCA1419	080116	BNORM BN2	080227	BOEING727	38407E
BLANCA1419	080118	BNORM BN2MK3	520203	BOEING727	38407G
BLANCA1419	080122	BNORM BN2MK3	520208	BOEING727	384082
BLANCA1419	080124	BOARD XJL1	320104	BOEING727	384084
BLANCA1419	080128	BOEING100	381902	BOEING727	38408B
BLANCA1419	080128	BOEING107	420802	BOEING727	38408D
BLANCA1419	580808	BOEING107	420804	BOEING727	38408F
BLANCA1419	580808	BOEING234	385049	BOEING727	38408J
BLANCA149	200802	BOEING307	381102	BOEING727	38408N
BLANCA149	200804	BOEING42	420102	BOEING727	38408S
BLANCA17	220432	BOEING707	38360H	BOEING727	3840XY
BLANCA17	220433	BOEING707	38360N	BOEING727	384481
BLANCA17	220434	BOEING707	38360P	BOEING737	384435
BLANCA17	220435	BOEING707	38360T	BOEING737	384453
BLANCA17	220436	BOEING707	38361G	BOEING737	384454
BLANCA17	220437	BOEING707	38365B	BOEING737	384459
BLANCA51	740151	BOEING707	38365D	BOEING737	384473

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BOEING737	384479	BRAERO748	500248	CESSNA170	072304
BOEING737	384480	BRAERO748	231001	CESSNA170	072308
BOEING737	384488	BRAERODH125	500205	CESSNA172	072202
BOEING737	38448D	BRANTLY B2	440502	CESSNA172	072402
BOEING737	38448G	BRANTLY B2	440504	CESSNA172	072404
BOEING737	38448M	BRANTLY B2	440506	CESSNA172	072408
BOEING737	38448P	BRASOVIS28	490102	CESSNA172	072408
BOEING737	38448R	BRASOVIS29	490106	CESSNA172	072410
BOEING737	38448V	BRWSTRFLEET10	482004	CESSNA172	072412
BOEING737	384492	BRWSTRFLEET1	481104	CESSNA172	072413
BOEING737	384550	BRWSTRFLEET2	481202	CESSNA172	072414
BOEING737	384580	BRWSTRFLEET2	481204	CESSNA172	072416
BOEING747	384802	BRWSTRFLEET7	481504	CESSNA172	072418
BOEING747	384807	BRWSTRFLEET7	481504	CESSNA172	072420
BOEING747	384810	BRWSTRFLEET7	481512	CESSNA172	072421
BOEING747	384813	BRWSTRFLEET8	481802	CESSNA172	072424
BOEING747	384815	BRWSTRFLEET8	481804	CESSNA172	072426
BOEING747	384823	BRWSTRFLEET9	481902	CESSNA172	072429
BOEING747	384858	BUHL CA3	650302	CESSNA172	072430
BOEING747	384866	BUHL LA1	651002	CESSNA172	072431
BOEING747	384871	BUKER 131	590104	CESSNA172	072432
BOEING747	384873	BUKER 131	590114	CESSNA172	072434
BOEING747	384874	BUKER 133	590328	CESSNA172	072436
BOEING747	384881	BURNS BA42	560103	CESSNA172	072437
BOEING747	384888	BUSHMS2000	350408	CESSNA172	072438
BOEING747	384890	BUTLERBHAWK	720102	CESSNA175	072502
BOEING747	384895	CAMAIR480	890102	CESSNA175	072504
BOEING747	384896	CAMROND50	880114	CESSNA175	072506
BOEING747	384903	CAMRONMODELO	880104	CESSNA175	072508
BOEING747	384920	CAMRONMODELO	880106	CESSNA177	073704
BOEING75	380102	CAMRONMODELO	880108	CESSNA177	073706
BOEING75	380104	CAMRONMODELO	880110	CESSNA177	073708
BOEING75	380106	CAMRONMODELO	880112	CESSNA177	073709
BOEING75	380108	CAMRONMODELO	880113	CESSNA180	072802
BOEING75	380112	CAMRONMODELO	880120	CESSNA180	072804
BOEING75	380116	CAMRONMODELO	880122	CESSNA180	072806
BOEING75	380118	CAMRONMODELO	880201	CESSNA180	072808
BOEING75	380120	CAMRONMODELO	880202	CESSNA180	072810
BOEING75	380122	CAMRONMODELO	880203	CESSNA180	072812
BOEING75	380124	CAMRONMODELO	880204	CESSNA180	072814
BOEING75	380131	CAMRONMODELO	880225	CESSNA180	072816
BOEING75	380132	CARMAMM200	981008	CESSNA180	072818
BOEING75	380134	CASA C212	410200	CESSNA180	072822
BOEING75	380136	CASA C212	410202	CESSNA180	072624
BOEING75	380137	CASA C212	410304	CESSNA182	072702
BOEING75	380140	CENTRL28	180604	CESSNA182	072704
BOEING75	380142	CESSNA120	071402	CESSNA182	072706
BOEING75	380144	CESSNA140	071802	CESSNA182	072708
BOEING75	380146	CESSNA140	071804	CESSNA182	072710
BOEING75	380148	CESSNA150	071802	CESSNA182	072712
BOEING75	380150	CESSNA150	071804	CESSNA182	072714
BOEING75	380152	CESSNA150	071806	CESSNA182	072716
BOEING75	380154	CESSNA150	071808	CESSNA182	072718
BOEING757	384950	CESSNA150	071810	CESSNA182	072722
BOEING757	384959	CESSNA150	071812	CESSNA182	072724
BOEING767	385122	CESSNA150	071814	CESSNA182	072726
BOEING767	385123	CESSNA150	071816	CESSNA182	072728
BOEING767	385132	CESSNA150	071818	CESSNA182	072730
BOEINGB17	380204	CESSNA150	071820	CESSNA182	072731
BOEINGC97	381804	CESSNA150	071822	CESSNA182	072732
BOEINGC97	381805	CESSNA150	071824	CESSNA182	072734
BOEINGC97	381811	CESSNA150	071826	CESSNA182	072735
BOEINGYL15	380810	CESSNA150	071828	CESSNA182	072736
BOEINXH47	090202	CESSNA150	071830	CESSNA182	075802
BOLKMS117	626010	CESSNA150	071831	CESSNA182	075806
BOLKMS209	626007	CESSNA150	071835	CESSNA182	075814
BOLKOWJR	400202	CESSNA150	071836	CESSNA182	075816
		CESSNA170	072302	CESSNA185	072802

**TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)**

SDR	FAA	SDR	FAA	SDR	FAA
CESSNA185	072804	CESSNA210	073438	CESSNA337	075723
CESSNA185	072806	CESSNA210	073439	CESSNA337	075724
CESSNA185	072808	CESSNA210	073440	CESSNA337	075725
CESSNA185	072812	CESSNA210	073448	CESSNA337	075728
CESSNA185	072818	CESSNA210	073447	CESSNA337	075727
CESSNA185	072818	CESSNA210	073448	CESSNA337	075730
CESSNA185	072821	CESSNA210	073449	CESSNA337	075731
CESSNA188	073002	CESSNA210	073450	CESSNA337	075732
CESSNA188	073004	CESSNA210	073451	CESSNA337	075733
CESSNA188	073005	CESSNA210	073453	CESSNA337	075733
CESSNA188	073008	CESSNA210	073454	CESSNA340	076404
CESSNA188	073007	CESSNA210	073455	CESSNA340	076405
CESSNA188	073008	CESSNA210	073456	CESSNA401	07590C
CESSNA188	073010	CESSNA305	073802	CESSNA401	07590D
CESSNA188	073011	CESSNA305	074001	CESSNA401	07590E
CESSNA188	073012	CESSNA305	074002	CESSNA402	07590K
CESSNA190	072902	CESSNA305	074003	CESSNA402	07590L
CESSNA195	073102	CESSNA305	074004	CESSNA402	07590M
CESSNA195	073108	CESSNA305	074005	CESSNA402	07590P
CESSNA195	073108	CESSNA305	074008	CESSNA402	07590R
CESSNA195	073110	CESSNA305	074008	CESSNA404	075901
CESSNA195	073112	CESSNA305	074012	CESSNA411	075902
CESSNA205	073202	CESSNA305	074014	CESSNA411	075904
CESSNA205	073204	CESSNA305	074016	CESSNA414	075907
CESSNA206	073302	CESSNA305	074018	CESSNA414	075908
CESSNA206	073304	CESSNA305	074030	CESSNA421	078010
CESSNA206	073308	CESSNA310	074202	CESSNA421	078012
CESSNA206	073308	CESSNA310	074204	CESSNA421	078014
CESSNA206	073309	CESSNA310	074206	CESSNA421	078018
CESSNA206	073310	CESSNA310	074208	CESSNA425	078018
CESSNA206	073311	CESSNA310	074210	CESSNA441	078020
CESSNA206	073312	CESSNA310	074212	CESSNA500	078802
CESSNA206	073313	CESSNA310	074214	CESSNA500	078804
CESSNA206	073318	CESSNA310	074218	CESSNA501	078805
CESSNA206	073318	CESSNA310	074218	CESSNA501	078805
CESSNA206	073322	CESSNA310	074220	CESSNA850	078802
CESSNA206	073324	CESSNA310	074222	CESSNAAW	070502
CESSNA206	073332	CESSNA310	074224	CESSNAT303	073803
CESSNA206	073333	CESSNA310	074226	CESSNAT37	074321
CESSNA206	073334	CESSNA310	074228	CESSNAT50	071302
CESSNA206	073338	CESSNA310	074230	CESSNAT50	071308
CESSNA206	073340	CESSNA310	074234	CESSNAT50	071308
CESSNA206	073342	CESSNA310	074238	CESSNAUC77	070702
CESSNA206	073344	CESSNA310	074240	CESSNAUC77	070802
CESSNA206	073348	CESSNA310	074242	CESSNAUC94	070902
CESSNA206	073348	CESSNA310	074244	CESSNAUC84	071002
CESSNA206	073350	CESSNA310	074245	CESSNAUC94	071102
CESSNA206	073352	CESSNA310	074248	CHILD S1	110100
CESSNA206	073353	CESSNA320	074502	CHILD S1	110301
CESSNA206	073356	CESSNA320	074504	CHILD S1	110303
CESSNA206	073357	CESSNA320	074508	CHILD S2	110201
CESSNA207	073802	CESSNA320	074508	CHILD S2	110202
CESSNA207	073804	CESSNA320	074510	CHILD S2	110304
CESSNA207	073812	CESSNA320	074512	CLARK 1000	230102
CESSNA207	073814	CESSNA320	074514	CLARK 12	230302
CESSNA210	073402	CESSNA320	074518	CNDAIRCL44	800102
CESSNA210	073404	CESSNA325	074802	CNDAIRCL800	900302
CESSNA210	073408	CESSNA335	075801	COAIRE3C	350102
CESSNA210	073408	CESSNA338	075802	COAIRE3C	350104
CESSNA210	073410	CESSNA337	075702	COAIRE3C	350108
CESSNA210	073412	CESSNA337	075704	COAIRE5C	350202
CESSNA210	073414	CESSNA337	075708	COLT 77A	300102
CESSNA210	073418	CESSNA337	075707	COMWTH175	370402
CESSNA210	073418	CESSNA337	075712	COMWTH180	370502
CESSNA210	073422	CESSNA337	075714	COMWTH180	370504
CESSNA210	073430	CESSNA337	075717	COMWTH185	370802
CESSNA210	073432	CESSNA337	075719	COMWTH185	370804
CESSNA210	073436	CESSNA337	075721	COMWTH185	370808
				COMWTH190	370704
				COMWTH7000	371208



TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
COMWTH9000	371422	CURTISTRVAIR	621904	DHAV	DHC2 800104
CONAERC1	110102	CURTISTRVAIR	621908	DHAV	DHC2 800105
CONAERC2	110202	CVAC	22 423302	DHAV	DHC2 800107
CONAERLA4	400102	CVAC	22 423304	DHAV	DHC2 800108
CONAERLA4	400108	CVAC	240 422801	DHAV	DHC2 800109
CONAERLA4	110302	CVAC	240 422802	DHAV	DHC2 801830
CONAERLA4	110304	CVAC	240 422804	DHAV	DHC3 800202
CONAERLA4	110306	CVAC	240 422808	DHAV	DHC4 800302
CONAERLA4	110310	CVAC	240 422810	DHAV	DHC4 800304
CONAERLA4	110312	CVAC	240 422812	DHAV	DHC6 802808
CONAERLA4	110320	CVAC	240 422828	DHAV	DHC7 802708
CORCRNGLIDER	480102	CVAC	240 422833	DHAV	DHC7 802710
CORCRNGLIDER	480122	CVAC	240 422842	DHAVXXDH82	801002
CORCRNGLIDER	480126	CVAC	240 422844	DHAVXXDH89	801015
CUNHAMPT6	580104	CVAC	240 422847	DOMION800	970102
CURTIS22	620202	CVAC	30 423202	DORNER133	999006
CURTISC46	622601	CVAC	30 423204	DORNERD028	990102
CURTISC46	622602	CVAC	340 422704	DORNERD028	990202
CURTISC46	622604	CVAC	340 422706	DORNERD028	991404
CURTISC46	622608	CVAC	340 42270A	DOUG	A20 020302
CURTISC46	622610	CVAC	340 422742	DOUG	A20 020306
CURTISC46	622701	CVAC	440 422902	DOUG	A24 020406
CURTISC46	622702	CVAC	440 422904	DOUG	A26 020504
CURTISC46	622708	CVAC	B24 422502	DOUG	A26 020506
CURTISC46	622710	CVAC	BT13 420202	DOUG	B23 020702
CURTISFLGLNG	620302	CVAC	BT13 420204	DOUG	B26 020514
CURTISJR	620502	CVAC	BT13 420206	DOUG	DC10 022110
CURTIS052	622002	CVAC	BT13 420208	DOUG	DC10 022111
CURTISP40	622202	CVAC	BT13 420222	DOUG	DC10 022114
CURTISP40	622203	CVAC	BT13 420224	DOUG	DC10 022118
CURTISP40	622206	CVAC	BT13 420228	DOUG	DC10 023501
CURTISROBIN	620802	CVAC	BT13 420230	DOUG	DC10 023503
CURTISROBIN	620806	CVAC	BT15 420302	DOUG	DC10 023508
CURTISROBIN	620812	CVAC	BT15 420312	DOUG	DC2 021302
CURTISSEDAN	620904	CVAC	L13 420702	DOUG	DC3 021401
CURTISTRVAIR	621004	CVAC	L13 420704	DOUG	DC3 021404
CURTISTRVAIR	621006	CVAC	L13 420706	DOUG	DC3 021424
CURTISTRVAIR	621010	CVAC	LB30 420804	DOUG	DC3 021433
CURTISTRVAIR	621012	CVAC	P4Y 421102	DOUG	DC3 021440
CURTISTRVAIR	621104	CVAC	PBY5 421208	DOUG	DC3 021454
CURTISTRVAIR	621108	CVAC	PBY5 421218	DOUG	DC3 021457
CURTISTRVAIR	621204	CVAC	PBY5 421230	DOUG	DC3 021458
CURTISTRVAIR	621302	CVAC	PBY6 421302	DOUG	DC3 021460
CURTISTRVAIR	621304	CVAC	STC580 422801	DOUG	DC3 021461
CURTISTRVAIR	621308	CVAC	STC580 422804	DOUG	DC3 021462
CURTISTRVAIR	621402	CVAC	STC580 422806	DOUG	DC3 021466
CURTISTRVAIR	621404	CVAC	STC580 423001	DOUG	DC3 021467
CURTISTRVAIR	621502	CVAC	STC600 422660	DOUG	DC3 021468
CURTISTRVAIR	621506	CVAC	STC840 422814	DOUG	DC3 021470
CURTISTRVAIR	621508	CVAC	V1A 421702	DOUG	DC3 021471
CURTISTRVAIR	621602	DART	G 700102	DOUG	DC3 021472
CURTISTRVAIR	621604	DART	G 700104	DOUG	DC3 021474
CURTISTRVAIR	621606	DART	G 700106	DOUG	DC3 021478
CURTISTRVAIR	621702	DART	G 700108	DOUG	DC3 021481
CURTISTRVAIR	621704	DAVIS	D1 740504	DOUG	DC4 021502
CURTISTRVAIR	621802	DAVIS	D1 740506	DOUG	DC4 021506
CURTISTRVAIR	621804	DAVIS	D1 740508	DOUG	DC4 021510
CURTISTRVAIR	621806	DAVIS	V3 743002	DOUG	DC4 021516
CURTISTRVAIR	621808	DHAV	DH82 801000	DOUG	DC4 021518
CURTISTRVAIR	621810	DHAV	DHC1 801702	DOUG	DC4 021522
CURTISTRVAIR	621814	DHAV	DHC1 801704	DOUG	DC4 021524
CURTISTRVAIR	621818	DHAV	DHC1 801712	DOUG	DC4 021528
CURTISTRVAIR	621820	DHAV	DHC1 801714	DOUG	DC4 021530
CURTISTRVAIR	621822	DHAV	DHC1 801716	DOUG	DC4 021534
CURTISTRVAIR	621824	DHAV	DHC1 801736	DOUG	DC4 021536
CURTISTRVAIR	621826	DHAV	DHC1 801738	DOUG	DC6 021702
CURTISTRVAIR	621830	DHAV	DHC1 801739	DOUG	DC6 021706
CURTISTRVAIR	621902	DHAV	DHC2 800102	DOUG	DC6 021710

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
DOUG DC8	021712	ENTWICPHEBUS	321210	FRCHLDKR34	371506
DOUG DC7	021802	EVNAIR4500	340104	FRCHLDM62	371604
DOUG DC7	021804	EVNAIR4500	340106	FRCHLDM62	371606
DOUG DC7	021806	FARZWKD1AMAT	550802	FRCHLDM62	371608
DOUG DC8	021906	FARZWKD1AMAT	550806	FRCHLDM62	371618
DOUG DC8	021908	FLEET 18B	480502	FRCHLDM62	371620
DOUG DC8	021910	FLTCHR24	530204	FRCHLDM62	371622
DOUG DC8	021912	FLTCHRF25	530102	FRCHLDM62	371624
DOUG DC8	021918	FLYGSTWEIHE	802219	FRCHLDM62	371626
DOUG DC8	021910	FOKKERF27	990617	FRCHLDM62	371628
DOUG DC8	021920	FOKKERF27	990620	FRCHLDM62	371630
DOUG DC8	021922	FOKKERF27	990626	FRCHLDM62	371632
DOUG DC8	021924	FOKKERF27	990629	FRCHLDM62	374004
DOUG DC8	021926	FOKKERF28	990808	FRCHLDM62	374006
DOUG DC8	021927	FOKKERF28	990810	FUNK FUNKC	720202
DOUG DC8	021928	FOMOCO4AT	590102	GARCIATROJAN	270102
DOUG DC8	021952	FOMOCO4AT	590104	GEM 205	380102
DOUG DC8	021953	FOMOCO5AT	590202	GENBALAX6	780102
DOUG DC8	021970	FOMOCO5AT	590204	GENBALAX6	780202
DOUG DC8	021972	FRANK 90	680102	GENBALSPRINT	780402
DOUG DC8	021978	FRCHLD21	371302	GLASFL201	800344
DOUG DC8	021970	FRCHLD22	370104	GLASFL304	800347
DOUG DC8	02198A	FRCHLD22	370108	GLASFLBS1	8003FB
DOUG DC8	02198B	FRCHLD22	370110	GLASFLH301	800335
DOUG DC8	02198F	FRCHLD22	370112	GLASFLH301	800337
DOUG DC8	02198H	FRCHLD22	370114	GLASFLH301	800339
DOUG DC8	02199A	FRCHLD22	370116	GLASFLH301	800341
DOUG DC9	022034	FRCHLD24	370202	GLASFLKESTRL	800343
DOUG DC9	022036	FRCHLD24	370204	GLASFLLIBELL	800346
DOUG DC9	022037	FRCHLD24	370206	GOLDENCHIEF	840102
DOUG DC9	02203H	FRCHLD24	370208	GOODYR813	870148
DOUG DC9	02203K	FRCHLD24	370216	GOODYRFG1D	870512
DOUG DC9	022051	FRCHLD24	370220	GOODYRGZ20	870220
DOUG DC9	022065	FRCHLD24	370302	GOODYRS30	870139
DOUG DC9	022066	FRCHLD24	370402	GOODYRTZ	870218
DOUG DC9	02206C	FRCHLD24	370408	GOVT N22	880102
DOUG DC9	02206E	FRCHLD24	370414	GROB 103CAT	660202
DOUG DC9	02207A	FRCHLD24	370502	GROB 109	660204
DOUG DC9	022080	FRCHLD24	370506	GROB 109	660205
DOUG DC9	022081	FRCHLD24	370514	GROB ASTIR	660104
DOUG DC9	022082	FRCHLD24	370516	GRTLKS2T1	910101
DOUG DOLPHN	020104	FRCHLD24	370520	GRTLKS2T1	910102
DRIGGSSSKYLK3	180502	FRCHLD24	370602	GRTLKS2T1	910104
DURMOLF48	200502	FRCHLD24	370606	GRTLKS2T1	910106
EAA SA9	650747	FRCHLD24	370614	GRTLKS2T1	910107
EAGLE DW	230203	FRCHLD24	370620	GRTLKS2T1	910108
EAGLEBAX7	240107	FRCHLD24	370626	GRUMANAF2S	950104
EAGLEBC7	240207	FRCHLD24	370628	GRUMANF8F	950602
EIRVON20	780102	FRCHLD71	370802	GRUMANF8F	950614
EIRVON20	780104	FRCHLDC119	372102	GRUMANF8F	95068G
EIRVON20	780202	FRCHLDC119	372106	GRUMANF7F	950704
EIRVON20	780204	FRCHLDC119	372108	GRUMANF8F	950801
EIRVON20	780206	FRCHLDC123	372202	GRUMANF8F	950802
EIRVON20	780207	FRCHLDC82	372002	GRUMANF9	950905
EMAIR MA1	280103	FRCHLDC82	372004	GRUMANFM	950102
EMAIR MA1	070102	FRCHLDF27	373002	GRUMANG134	951000
EMB 110	280122	FRCHLDF27	373004	GRUMANG21	951205
ENSTRM280	300502	FRCHLDF27	373006	GRUMANG44	951602
ENSTRM280	300505	FRCHLDF27	373016	GRUMANG73	951902
ENSTRM280	300510	FRCHLDF45	371202	GRUMANS16	950404
ENSTRM280	300550	FRCHLDFC2	371102	GRUMANS16	950405
ENSTRMF28	300404	FRCHLDFH1100	376502	GRUMANS16	950406
ENSTRMF28	300406	FRCHLDFH1100	381405	GRUMANS16	950410
ENSTRMF28	300407	FRCHLDFH1100	381415	GRUMANS16	950412
ENSTRMF28	300412	FRCHLDFH227	373042	GRUMANS16	950413
ENSTRMF28	300430	FRCHLDFH227	373050	GRUMANS16	950414
ENTWICPHEBUS	403014	FRCHLDKR31	371402	GRUMANS16T	950407
ENTWICPHEBUS	321206	FRCHLDKR34	371504	GRUMANS16T	950408

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
GRUMANTS2	951102	GULSTMAA5	831410	HELIO H295	300803
GRUMAVAA1	830820	GULSTMAA5	980106	HELIO H295	301101
GRUMAVAA1	980100	GULSTMG1159	953505	HELIO H295	301102
GRUMAVAA1	980103	GULSTMG1159	953535	HELIO H295	301104
GRUMAVAA5	980104	GULSTMG1159	970109	HELIO H391	300102
GRUMAVAA5	980105	GULSTMG159	952202	HELIO H391	300108
GRUMAVG1159	980302	GULSTMG44	951502	HELIO H395	300202
GRUMAVG164	952702	GULSTMG44	951508	HELIO H395	300208
GRUMAVG164	952801	GULSTMG73	951802	HELIO H800	300500
GRUMAVG164	952802	GULSTMG47	980401	HELIO HST550	301002
GRUMAVG164	952803	H-1	181401	HELIO HST550	301008
GRUMAVG164	952804	H-1	181405	HILLERUH12	380102
GRUMAVG164	980201	H-1	181407	HILLERUH12	380104
GRUMAVG164	980202	H-1	181408	HILLERUH12	380110
GRUMAVG164	980203	H-1	181409	HILLERUH12	380118
GRUMAVG164	980204	H-1	181410	HILLERUH12	380118
GRUMAVG164	979904	H-1	181411	HILLERUH12	380122
GRUMAVG21	951202	H13/HTL	180808	HILLERUH12	380124
GRUMAVG21	951204	H13/HTL	180808	HILLERUH12	380125
GRUMAVG21	951218	H13/HTL	180809	HILLERUH12	380128
GRUMAVG89	951008	H13/HTL	180810	HILLERUH12	380128
GRUMAVJ2F	950208	H13/HTL	180814	HILLERUH12	380131
GRUMAVTBM	950308	H13/HTL	180820	HILLERUH12	380132
GRUMAVTBM	950308	H13/HTL	180904	HILLERYROE1	382402
GRUMAVTBM	950310	H13/HTL	181005	HWLYPGHP137	130402
GULSTM112	144701	H13/HTL	181008	HOWARD500	390102
GULSTM112	830302	H13/HTL	181007	HUGHES289	470402
GULSTM112	830308	H13/HTL	181010	HUGHES289	470403
GULSTM112	830307	H13/HTL	181585	HUGHES289	470404
GULSTM112	830314	H13/HTL	930102	HUGHES289	470502
GULSTM112	830315	H13/HTL	930103	HUGHES289	470504
GULSTM112	830318	H13/HTL	930105	HUGHES289	471004
GULSTM500	141102	H18/45	141808	HUGHES289	470702
GULSTM500	141104	H19/45	141809	HUGHES389	470704
GULSTM500	141106	H18/45	141810	HUGHES389	470706
GULSTM500	141107	H19/45	141814	HUGHES389	470707
GULSTM500	141108	H19/45	141815	HUGHES389	470708
GULSTM520	141202	H19/45	141816	HUGHES389	470718
GULSTM580	141402	H19/45	141818	HUGHES389	470720
GULSTM580	141404	H19/45	14181E	HUGHES389	470722
GULSTM580	141406	H19/45	14181G	HUGHES389	470728
GULSTM580	141408	H19/45	14181J	HUGHES389	470730
GULSTM680	141602	H23/HTE	380108	HUGHES389	470731
GULSTM680	141604	H23/HTE	380109	HUGHES389	470805
GULSTM680	141606	H23/HTE	380111	HUGHES500	470808
GULSTM680	141608	H23/HTE	380119	HWKSLY80A	800902
GULSTM680	141610	H23/HTE	380120	HWKSLYDH104	800402
GULSTM680	141611	H23/HTE	380121	HWKSLYDH104	800404
GULSTM680	141612	H23/HTE	380123	HWKSLYDH104	800408
GULSTM680	141802	H23/HTE	380135	HWKSLYDH104	800410
GULSTM680	830513	H23/HTE	382303	HWKSLYDH104	800412
GULSTM680TP	141712	H23/HTE	382305	HWKSLYDH104	800414
GULSTM680TP	141714	H34/55	141810	HWKSLYDH108	800308
GULSTM680TP	141716	H34/55	141812	HWKSLYDH114	800504
GULSTM680TP	141718	H34/55	141813	HWKSLYDH114	800508
GULSTM690TC	970404	H34/55	141815	HWKSLYDH125	500204
GULSTM690TP	141720	H34/55	141818	HWKSLYDH125	210101
GULSTM690TP	141722	H34/55	141819	HWKSLYDH125	230106
GULSTM690TP	970405	H34/55	141823	HWKSLYDH125	230110
GULSTM690TP	970410	H37	141817	HWKSLYDH125	230128
GULSTM690TP	970411	H37	142302	HWKSLYDH125	230138
GULSTM690TP	830515	H37	142801	HWKSLYDH125	23013M
GULSTM690TP	830518	HAMFLUHF8320	071204	HWKSLYDH125	23013P
GULSTM690TP	830517	HARTMNOW5M	200102	HWKSLYDH125	230140
GULSTM690TP	830518	HEATH CNA40	250102	HWKSLYDH125	230158
GULSTM690TP	830519	HEATH LNB4	250202	HWKSLYDH125	230180
GULSTMAA1	830810	HELIO H250	300302	HYNES 305	440802
GULSTMAA1	830710	HELIO H295	300802		

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
INDAERP166	960202	LKHEED12A	261402	MAULE M4	460105
INLANDR400	550502	LKHEED1329	263102	MAULE M4	460106
INLANDS300	551002	LKHEED1329	263108	MAULE M4	460108
INLANDW500	552002	LKHEED1329	263125	MAULE M4	460112
INTRCP200	650304	LKHEED1649	262204	MAULE M4	460114
INTRCP200	650306	LKHEED18	261602	MAULE M4	460128
INTRCP200	650308	LKHEED18	261624	MAULE M4	460132
INTRCP200	650310	LKHEED18	261634	MAULE M5	460133
ISRAEL 101	500204	LKHEED18	261636	MAULE M5	460134
ISRAEL 1121	142002	LKHEED18	261640	MAULE M5	460135
ISRAEL 1121	142006	LKHEED18	261642	MAULE M5	460204
ISRAEL 1121	142010	LKHEED188	262602	MAULE M8	460180
ISRAEL 1123	500101	LKHEED188	262604	MBB B0105	626005
ISRAEL 1124	500102	LKHEED282	262504	MBB B0105	626006
ISRAEL 1124	500103	LKHEED300	264504	MCBEMSLARK95	331020
JAMISNJ1	650502	LKHEED382	264104	MCBEMSLARK95	160202
JAMISNJ2	651004	LKHEED382	26413U	MCKINNG21	550202
JBMSTRDGA11	690302	LKHEED382	26414U	MCKINNG21T	550105
JBMSTRDGA15	690502	LKHEED49	261702	MCKINNG21T	550120
JBMSTRDGA15	690506	LKHEED49	262002	MCLISHFUNKB	480102
JBMSTRDGA15	690516	LKHEED49	262004	MCLISHFUNKB	480104
JBMSTRDGA18	690604	LKHEED49	262008	MCLISHFUNKB	480108
JBMSTRDGA8	690102	LKHEEDP2V	260110	MCLISHFUNKB	480202
KAISERF5	762002	LKHEEDP2V	260112	MCLISHFUNKB	480204
KAMAN K800	800802	LKHEEDP2V	269601	MCLISHFUNKB	480208
KAWSKIKV107	820101	LKHEEDP38	260201	MEYERSMAC145	650104
KELLETKD1	850106	LKHEEDP38	260203	MEYERSOTW	650202
KINNERB	940202	LKHEEDP38	260204	MEYERSOTW	650206
KINNERB	940204	LKHEEDP38	260205	MEYERSOTW	650208
KINNERR	940102	LKHEEDP38	260206	MILLERUT1	720102
LAIKFN10	090204	LKHEEDP38	260207	MITCHL101	000102
LAIKFNBA100	0901FB	LKHEEDP38	260214	MITCHL101	000104
LAIRD LC	070102	LKHEEDPV1	260102	MNCOUP110	810202
LAIRD LC	070104	LKHEEDPV1	260106	MNCOUP110	810204
LAIRD LCB	070110	LKHEEDT33	260401	MNCOUP90	810102
LAISTRLP15	100108	LKHEEDT33	260402	MNCOUP90	810104
LAISTRLP15	100202	LKHEEDT33	260406	MNCOUP90	810107
LAISTRLP15	100203	LKHEEDVEGA1	261002	MNCOUP90	810110
LAISTRLP46	100101	LKHEEDVEGA5	261202	MNMITEM18	870102
LAISTRLP49	100102	LKHEEDV03A	269501	MNMITEM18	870104
LEAR 23	170102	LKINTL402	263406	MNMITEM18	870106
LEAR 24	170302	LUSCOMB1	350102	MNMITEM18	870108
LEAR 24	170304	LUSCOMB4	350202	MNSLNRMS760	910102
LEAR 24	170306	LUSCOM8	190102	MNSLNRMS760	910106
LEAR 24	170307	LUSCOM8	190104	MODFD47	180822
LEAR 24	170310	LUSCOM8	190106	MODFD47	180843
LEAR 24	170311	LUSCOM8	190108	MODFD47	180845
LEAR 25	170506	LUSCOM8	190110	MODFD47	180847
LEAR 25	170509	LUSCOM8	190112	MODFD47	18084C
LEAR 25	170511	LUSCOM8	190114	MODFD47	18084F
LEAR 25	170513	LUSCOM8	190116	MODFD47	18084G
LEAR 25	170514	LUSCOM8	190118	MODFD47	18084P
LEAR 28	170528	LUSCOM8	190120	MODFD47	18084R
LEAR 28	170529	LUSCOM8	190122	MODFD47	18084V
LEAR 35	170600	LUSCOM8	190124	MODFD47	181001
LEAR 35	170601	LUSCOM8	190126	MODFD47	181003
LEAR 35	170602	LUSCOM8	190128	MODFD47	18100V
LEAR 55	170702	LUSCOM8	190130	MODFD47	181013
LET L13	360306	LUSCOM8	190132	MODFD47	181023
LKHEED10	261302	LUSCOM8	190154	MODFD47	181027
LKHEED10	261314	MACCHIAL60	400106	MODFD47	181033
LKHEED1011	265010	MACCHIAL60	400108	MODFD47	18103H
LKHEED1011	265015	MAEL BA42	430102	MODFD47	18103Z
LKHEED1011	265020	MARTIN202	450602	MODFD47	181080
LKHEED1049	262118	MARTIN202	450604	MODFD47	181081
LKHEED1049	262121	MARTIN404	450702	MODFD47	181083
LKHEED1049	262131	MAULE M4	460102	MODFD47	181085
LKHEED1049	262140	MAULE M4	460104	MODFD47	181086

**TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)**

<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>
MODFD47	181087	NAMER B25	400713	NICBEZ8G	280202
MODFD47	181088	NAMER B25	400714	NIHON YS11	310406
MODFD47	181089	NAMER B25	400718	NIHON YS11	310418
MODFD47	181071	NAMER F51	402301	NOORDNUC84	330204
MODFD47	181074	NAMER F51	402302	NORD SV4	383008
MODFD47	181308	NAMER F51	402303	NORD SV4	470102
MODFD47	181310	NAMER F51	402304	NORWST35	480102
MODF DUH12	380103	NAMER F51	402305	NORWST35	480104
MODF DUH12	380105	NAMER F51	402307	NORWST35	480108
MODF DUH12	380113	NAMER F51	402308	NORWST35	480128
MODF DUH12	380118	NAMER F51	402309	NORWST40	480110
MODF DUH12	380117	NAMER F82	401522	NORWST50	480114
MODF DUH12	380130	NAMER NA280	402502	NORWST85	480118
MODF DUH12	380801	NAMER NA280	402504	NORWST85	480118
MODF DUH12	380701	NAMER NA280	402505	NORWST85	480122
MODF DUH12	380702	NAMER O47	402202	NORWST85	480124
MODF DUH12	380704	NAMER P84	402408	NORWSTEAGLE	880120
MODF DUH12	380801	NAMER T8	922828	OBERNRMG23SL	801048
MODF DUH12	380809	NAMER T8	400402	OTHEXMILPIST	385008
MODF DUH12	380810	NAMER T8	400404	OTHEXMILPIST	800702
MODF DUH12	381101	NAMER T8	400405	OTHEXMILPIST	800803
MODF DUH12	381301	NAMER T8	400406	OTHEXMILPIST	800804
MODF DUH12	381501	NAMER T8	400407	OTHEXMILPIST	800805
MOONEYM20	870202	NAMER T8	400410	OTHEXMILPIST	140102
MOONEYM20	870204	NAMER T8	400412	OTHEXMILPIST	140304
MOONEYM20	870208	NAMER T8	400414	OTHEXMILPIST	141108
MOONEYM20	870208	NAMER T8	400415	OTHEXMILPIST	141812
MOONEYM20	870210	NAMER T8	400418	OTHEXMILPIST	420108
MOONEYM20	870212	NAMER T8	400417	OTHEXMILTURB	181504
MOONEYM20	870214	NAMER T8	400418	OTHEXMILTURB	385080
MOONEYM20	870219	NAMER T8	400419	OTHEXMILTURB	385084
MOONEYM20	870220	NAMER T8	400420	OTHEXMILTURB	470904
MOONEYM20	870308	NAMER T8	400422	OTHEXMILTURB	470905
MOONEYM20	870312	NAMER T8	400423	OTHEXMILTURB	800704
MOONEYM20	870314	NAMER T8	400424	OTHEXMILTURB	800708
MOONEYM20	870801	NAMER T8	400426	OTHEXMILTURB	141308
MOONEYM20	870805	NAMER T8	400430	OTHEXMILTURB	142109
MOONEYM22	870402	NAMER T8	400431	PARKS P1T	770102
MOONEYM30	872030	NAMER T8	400432	PARMNTCABAIR	750102
MORISY2000	940102	NAMER T8	400434	PARTENP88	780101
MOTH 80	000102	NAMER T8	400436	PARTENP88	780105
MOTH 80	000104	NAMER T8	400441	PARTENP88	780108
MRCHTIF280	121208	NAMER T8	400442	PASPEDW1	790102
MRCHTIS205	120412	NARDI FN333	080102	PDMILRY1S	740102
MTSBSIMU2	780404	NARDI FN333	120704	PECOCKPJC	180204
MTSBSIMU2	780405	NATBAL752	113310	PERTH BIRD	840122
MTSBSIMU2	780406	NATBAL752	113312	PERTH BIRD	840128
MTSBSIMU2	780407	NATBAL752	113317	PERTH BIRD	840132
MTSBSIMU2	780408	NATBAL752	113320	PHESNTH10	880102
MTSBSIMU2	780409	NAVAL N3N	120202	PIAGIOP138	980102
MTSBSIMU2	780410			PIAGIOP138	980104
MTSBSIMU2	780411	NAVIONNAVION	150108	PIAGIOP138	980108
MTSBSIMU2	780412	NAVIONNAVION	150108	PIASEXHUP2	980320
MTSBSIMU2	780413	NAVIONNAVION	150110	PICARDA5	001218
MTSBSIMU2	780414	NAVIONNAVION	150118	PICARDAX8	001218
MTSBSIMU300	780802	NAVIONNAVION	150132	PIGMANREARWN	070104
MULTECD18	230802	NAVIONNAVION	150134	PIGMANREARWN	070302
MULTECD18	230804	NAVIONNAVION	150138	PIGMANREARWN	070308
MULTECD18	230806	NAVIONNAVION	150140	PILATSB4	090103
MULTECD18	230808	NAVIONNAVION	150142	PILATSB4	090104
MULTECD18	230810	NAVIONNAVION	150148	PILATSPC8	375014
MULTECD18	230812	NAVIONNAVION	150180	PILATSPC8	090102
NAMER A36	400102	NAVIONNAVION	150182	PILATSPC8	090110
NAMER B25	400702	NAVIONNAVION	150188	PILATSPC8	090114
NAMER B25	400704	NAVIONNAVION	150170	PILATSPC8T	375011
NAMER B25	400705	NAVIONNAVION	150172	PILATSPC8T	090202
NAMER B25	400708	NAVIONNAVION	150174	PILATSPC8T	090210
NAMER B25	400710	NAVIONNAVION	150178	PILATSPC8T	100102
NAMER B25	400712	NELSONB51	200102		

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
PIPER 600	106001	PIPER PA18	101828	PIPER PA31T	103128
PIPER 600	106010	PIPER PA18	101832	PIPER PA32	103206
PIPER 600	106012	PIPER PA18	101834	PIPER PA32	103207
PIPER 600	106014	PIPER PA18	101836	PIPER PA32	103209
PIPER 600	106015	PIPER PA18	101837	PIPER PA32	103211
PIPER 600	106023	PIPER PA18	101838	PIPER PA32	103212
PIPER 600	360607	PIPER PA18	101880	PIPER PA32	103213
PIPER E2	100302	PIPER PA18	101902	PIPER PA32	103214
PIPER F2	100304	PIPER PA18	101904	PIPER PA32	103215
PIPER J2	100402	PIPER PA20	102002	PIPER PA32	103216
PIPER J3	100501	PIPER PA20	102004	PIPER PA32	103218
PIPER J3	100502	PIPER PA20	102006	PIPER PA32	103220
PIPER J3	100506	PIPER PA20	102010	PIPER PA34	103405
PIPER J3	100508	PIPER PA20	102012	PIPER PA34	103406
PIPER J3	100510	PIPER PA22	102202	PIPER PA34	103420
PIPER J3	100511	PIPER PA22	102204	PIPER PA36	103610
PIPER J3	100512	PIPER PA22	102206	PIPER PA36	103612
PIPER J3	100514	PIPER PA22	102208	PIPER PA36	103620
PIPER J3	100516	PIPER PA22	102210	PIPER PA38	103812
PIPER J3	100518	PIPER PA22	102212	PIPER PA42	104202
PIPER J3	100519	PIPER PA22	102214	PIPER PA42	104212
PIPER J3	100520	PIPER PA22	102216	PIPER PA44	104402
PIPER J3	100522	PIPER PA23	102302	PIPER PA44	104404
PIPER J3	100526	PIPER PA23	102303	PIPER PA48	104805
PIPER J3	100528	PIPER PA23	102304	PIPER TG8	100102
PIPER J3	10052T	PIPER PA23	102305	PIRTLEROC185	140107
PIPER J3	100532	PIPER PA23	102306	PIRTLEROC185	140189
PIPER J3	100536	PIPER PA23	102308	PITCANPA4	180102
PIPER J3	100542	PIPER PA23	102309	PITCANPA5	180202
PIPER J3	100546	PIPER PA23	102310	PITCANPA6	180302
PIPER J3	100550	PIPER PA24	102402	PITCANPA7	180402
PIPER J3	100552	PIPER PA24	102403	PITCANPA7	180406
PIPER J3	101102	PIPER PA24	102404	POST A	280102
PIPER J3	101104	PIPER PA24	102406	PRATT PRG1	300102
PIPER J4	100602	PIPER PA24	102408	PRATT PRG1	300106
PIPER J4	100604	PIPER PA24	102409	PROPJT200	140302
PIPER J4	100605	PIPER PA25	102502	PROPJT200	140312
PIPER J4	100606	PIPER PA25	102504	PROPJT200	140314
PIPER J4	100608	PIPER PA25	102508	PROPJT400	560404
PIPER J4	100610	PIPER PA28	102802	RAVEN MG1000	483202
PIPER J4	100614	PIPER PA28	102803	RAVEN RX8	480502
PIPER J5	100202	PIPER PA28	102804	RAVEN S40	480104
PIPER J5	100702	PIPER PA28	102805	RAVEN S50	5604XW
PIPER J5	100706	PIPER PA28	102806	RAVEN S50	480204
PIPER J5	100708	PIPER PA28	102807	RAVEN S55	480402
PIPER J5	100712	PIPER PA28	102808	RAVEN S60	480606
PIPER L14	100902	PIPER PA28	102809	RAVEN S60	480610
PIPER PA12	101202	PIPER PA28	102810	RAVEN S66	480612
PIPER PA12	101204	PIPER PA28	102811	RAWDONT1	500102
PIPER PA14	101402	PIPER PA28	102813	REIMS 150	530128
PIPER PA15	101502	PIPER PA28	102814	REIMS 150	530132
PIPER PA16	101602	PIPER PA28	102815	REIMS 150	530134
PIPER PA17	101702	PIPER PA28	102816	REIMS 172	530136
PIPER PA18	101802	PIPER PA28	102817	REIMS 172	530139
PIPER PA18	101804	PIPER PA28	102818	REIMS 172	530203
PIPER PA18	101806	PIPER PA28	102818	REIMS 172	530204
PIPER PA18	101808	PIPER PA28	102819	REIMS 172	530206
PIPER PA18	101808	PIPER PA28	102830	REIMS 172	530209
PIPER PA18	101809	PIPER PA30	103002	REIMS 172	530210
PIPER PA18	101812	PIPER PA30	103902	REIMS 177	530211
PIPER PA18	101813	PIPER PA30	104002	REIMS 337	535726
PIPER PA18	101814	PIPER PA31	103102	REPBLCP47	570405
PIPER PA18	101815	PIPER PA31	103104	RHNFLURW3	600504
PIPER PA18	101816	PIPER PA31	103105	RKWEILL500	630410
PIPER PA18	101818	PIPER PA31	103110	RKWEILL700	630520
PIPER PA18	101820	PIPER PA31	103120	RKWEILLNA265	402608
PIPER PA18	101822	PIPER PA31T	103124	RKWEILLNA265	402612
PIPER PA18	101824	PIPER PA31T	103126	RKWEILLNA265	402614
PIPER PA18	101826	PIPER PA31T	103127		

**TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)**

<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>
RKWE LNA285	402818	SCWZERSG1	050112	SKRSKYS70	143001
RKWE LNA285	830101	SCWZERSG1	050114	SKRSKYS78	143008
RKWE LNA285	830104	SCWZERSG1	050118	SKRSKYS78	143010
RKWE LNA285	830106	SCWZERSG1	050118	SLINDS100	140202
RKWE LNA285	830107	SCWZERSG1	050120	SLINDS100	140208
RKWE LNA285	830108	SCWZERSG1	050122	SLINDS100	550102
ROBSINR22	840102	SCWZERSG1	050124	SLINDS100	550104
ROBSINR22	840104	SCWZERSG1	050148	SLINDSB	144308
ROLSCHLS	801208	SCWZERSG1	050147	SLINDSB	144308
ROLSCHLS	801208	SCWZERSG1	050148	SLINDSB	571008
FOLSCHLS	801211	SCWZERSG1	050149	SLNSBY43	320208
ROLSCHLS	801214	SCWZERSG1	050151	SLNSBYKITE	320102
ROLSCHLS	801250	SCWZERSG1	050153	SLNSBYT45	320304
ROOS 129	880108	SCWZERSG1	050502	SLNSBYT49	321008
ROOS 1928	880204	SCWZERSG2	050202	SLNSBYT50	320402
ROOS A1	880102	SCWZERSG2	050208	SLNSBYT51	320802
ROOS A1	880104	SCWZERSG2	050210	SLNSBYT53	321508
ROOS PT	880312	SCWZERSG2	050802	SLNSBYT59	321510
ROSE A1	710102	SCWZERSG2	050804	SMITH 800	710802
RYAN SCW	830302	SCWZERSG2	050808	SMITH 800	710808
RYAN ST3	830502	SCWZERSG2	050810	SMITH 800	380802
RYAN ST3	830504	SCWZERSG2	050812	SMITH 800	380804
RYAN STA	830402	SCWZERSG2	050814	SMITH 800	380805
RYAN STA	830404	SCWZERSG2	051404	SMITH 800	380808
RYANARB	840102	SCWZERSG2	051804	SMITH 800	380808
SAAB SF340	850100	SCWZERSG2	051808	SNIAS AS332	880808
SCBFLG111	801381	SCWZERTG3A	050902	SNIAS AS332	880809
SCBFLGBERGFK	801315	SEMCO 30	070504	SNIAS AS350	880801
SCBFLGSF25	801322	SEMCO CLNGER	070802	SNIAS AS350	880802
SCBFLGSF25	801325	SEMCO MARKV	071802	SNIAS AS350	880803
SCBFLGSF27	80135F	SEMCO MODEL T	071701	SNIAS AS355	880805
SCBFLGSF27	80135V	SEMCO TC4	071408	SNIAS AS355	880808
SCBFLGSF28	80135X	SEMCO TC4	071409	SNIAS CONCRD	890102
SCHLER13	8015GS	SIQUX 80	250102	SNIAS SA318	880508
SCHLERASK14	8015GW	SIQUX 80	250108	SNIAS SA318	880508
SCHLERASK21	8015GY	SIREN C30	270302	SNIAS SA318	880511
SCHLERASW12	8015HR	SKRSKYS39	140502	SNIAS SA330	880612
SCHLERASW15	8015H2	SKRSKYS51	141102	SNIAS SA341	880610
SCHLERASW15	8015H2	SKRSKYS52	141308	SNIAS SE313	880502
SCHLERASW17	801507	SKRSKYS55	141802	SOCATAMS880	910304
SCHLERASW19	801505	SKRSKYS55	141803	SOCATAMS893	402838
SCHLERASW19	801508	SKRSKYS55	141804	SOCATAMS894	402842
SCHLERASW20	801503	SKRSKYS55	141808	SOCATARALLYE	400125
SCHLERASW20	801506	SKRSKYS55	141800	SOCATARALLYE	400131
SCHLERII	801581	SKRSKYS58	141801	SPARTN7W	430302
SCHLERK	801551	SKRSKYS58	141803	SPARTNC2	430102
SCHLERK2K7	801554	SKRSKYS58	141804	SPARTNC3	430208
SCHLERK8	801559	SKRSKYS58	141805	SPARTNC3	430208
SCHLERK8	801563	SKRSKYS58	141808	SPARTNC3	430210
SCHLERK8	801567	SKRSKYS58	141807	SPHRTHCIRRUS	8019VC
SCHLERK8	8019VK	SKRSKYS58	141808	SPHRTHCIRRUS	8019VE
SCHLERK8	8019VL	SKRSKYS58	141809	SPHRTHJANUS	802002
SCHLERKA8	801525	SKRSKYS58	141811	SPHRTHNIMBUS	801923
SCHLERKA8	801528	SKRSKYS58	141814	SPHRTHNIMBUS	801925
SCHLERKA8	801530	SKRSKYS58	141837	SPHRTHNIMBUS	801950
SCHLERKA8	801535	SKRSKYS58	141839	SPHRTHNIMBUS	8019VD
SCHLERKA8	801537	SKRSKYS58T	141840	SPHRTHNIMBUS	8019VF
SCHLERKA8	801540	SKRSKYS58T	141842	SPHRTHNIMBUS	8019VG
SCHLERKA8	801542	SKRSKYS58T	141844	SPHRTHNIMBUS	8019VJ
SCHLERKA8	801545	SKRSKYS81	142101	SPHRTHS	801933
SCHZOWMODEL8	580221	SKRSKYS81	142102	SPHRTHS	801939
SCUZERSG2	050207	SKRSKYS81	142103	SPHRTSH1	801945
SCWZERGI84	952704	SKRSKYS81	142104	SPHRTSHK	801920
SCWZERSG1	050102	SKRSKYS81	142107	SPHRTHVENTUS	802050
SCWZERSG1	050104	SKRSKYS81	14210C	SPHRTHVENTUS	802051
SCWZERSG1	050108	SKRSKYS82	142202	SPORT GEOPEN	802433
SCWZERSG1	050108	SKRSKYS84	142804	SPTPUZRF4D	451012
SCWZERSG1	050110	SKRSKYS70	143000	SPTPUZRF5	451014

**TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)**

<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>
SPTPUZRF5	451018	STRMAN8	580402	TEMCO T35	890801
STAR CAVALR	480102	SUD QY80	881008	TEMCO T35	890802
STAR CAVALR	480104	SUD SE210	880208	TEMCO TT1	890502
STAR CAVALR	480108	SUPAC 14	730402	TH55	471002
STATE F	521004	SUPAC 14	730404	THUNDRAx5	5804UK
STBROSMK111	100102	SUPAC LA	730202	THUNDRAx5	5804UM
STBROSS2B	100525	SUPAC LA	730204	THUNDRAx5	5804UN
STBROSSC7	100512	SUPAC LA	730208	THUNDRAx5	5804UP
STBROSSD3	100802	SUPAC LA	730208	THUNDRAx5	970100
STLOUSC2	820304	SUPAC V	730302	THUNDRAx6	970102
STLOUSYPT15	820302	SUPAC V	730308	THUNDRAx6	970104
STNSON10	832002	SWALOWSWALOW	760102	THUNDRAx7	970105
STNSON10	832004	SWALOWTP	760202	THUNDRAx7	970108
STNSON10	832102	SWRNGNSA228	780122	THUNDRAx7	970107
STNSON10	832104	SWRNGNSA228	780404	THUNDRAx7	970108
STNSON8000	830904	SWRNGNSA228	780405	THUNDRAx7	970110
STNSONA	830901	SWRNGNSA228	780408	THUNDRAx7	970120
STNSONJR	830402	SWRNGNSA227	780803	THUNDRAx8	970111
STNSONJR	830404	SWRNGNSA227	780810	THUNDRAx8	970112
STNSONJR	830408	SWRNGNSA227	780815	THUNDRAx9	970115
STNSONL1	830102	SWRNGNSA227	780820	TIMM COLEGT	980102
STNSONL1	830114	SWRNGNSA28	780102	TIMM N2T	980202
STNSONL5	830202	SWRNGNSA28	780112	TMPSONNAVION	150104
STNSONL5	830204	SZD 41	821841	TMPSONNAVION	150112
STNSONL5	830208	SZD 45	822002	TMPSONNAVION	150114
STNSONL5	830210	SZD 48	821848	TMPSONNAVION	150120
STNSONL5	830212	TCRAFK21	850808	TMPSONNAVION	150122
STNSONL5	830214	TCRAFKD	850402	TMPSONNAVION	150130
STNSONSM2	830804	TCRAFKD	850404	TOMCAT	180818
STNSONSM7	830702	TCRAFKD	850408	TOMCAT	181082
STNSONSM7	830704	TCRAFKD	850410	TOMCAT	390101
STNSONSM8	830802	TCRAFKD	850412	TOMCAT	390202
STNSONSR10	831802	TCRAFKD	850414	TOMCAT	390204
STNSONSR10	831804	TCRAFKD	850415	TOMCAT	390301
STNSONSR10	831808	TCRAFKD	850418	TOMCAT	390302
STNSONSR10	831814	TCRAFKD	850420	TOMCAT	390303
STNSONSR10	831818	TCRAFT15A	850702	TOMCAT	390304
STNSONSR10	831820	TCRAFT20	851002	TOMCAT	390305
STNSONSR5	831102	TCRAFTA	850202	TRYTEK85	190408
STNSONSR5	831104	TCRAFTBC	850302	TRYTEK85	190712
STNSONSR5	831108	TCRAFTBC	850304	TRYTEK85	190718
STNSONSR5	831110	TCRAFTBC	850308	TRYTEK85	190920
STNSONSR5	831112	TCRAFTBC	850308	TRYTEK85	190922
STNSONSR6	831202	TCRAFTBC	850310	TRYTEK85	190928
STNSONSR6	831204	TCRAFTBC	850314	TRYTEK85	190928
STNSONSR7	831304	TCRAFTBC	850318	TRYTEK85	190930
STNSONSR7	831308	TCRAFTBC	850318	TRYTEK85	190932
STNSONSR8	831404	TCRAFTBC	850320	TRYTEKCF	190202
STNSONSR8	831408	TCRAFTBC	850322	TRYTEKK	190402
STNSONSR8	831412	TCRAFTBC	850323	TRYTEKK	190404
STNSONSR8	831418	TCRAFTBC	850324	TRYTEKKC	190204
STNSONSR9	831502	TCRAFTBC	230918	UNIPRO113	250302
STNSONSR9	831504	TCRAFTBC	230920	UNIPRO70	250202
STNSONSR9	831508	TCRAFTBC	230924	UNIPROD145	250502
STNSONSR9	831518	TCRAFTBC	230928	UNIVACGC1	230102
STNSONSR9	831528	TCRAFTBF	850328	UNIVACGC1	230104
STNSONV77	831802	TCRAFTBF	850332	UNIVACGC1	230108
STNSONV77	831804	TCRAFTBF	850338	UNIVACGC1	230108
STNSONW	831902	TCRAFTBF	850340	UNIVACGC1	230110
STOLACUC1	840202	TCRAFTBL	850348	UNIVACGC1	230112
STOLACUC1	220102	TCRAFTBL	850350	UNIVAR108	230402
STOLAMRC3	080202	TCRAFTBL	850354	UNIVAR108	230404
STOLAMRC3	080204	TCRAFTBL	850358	UNIVAR108	230408
STOLAMRC3	080206	TCRAFTTC8	850102	UNIVAR108	230408
STRMAN3	580202	TEAL TSC1A	880102	UNIVAR108	230412
STRMAN3	580208	TEAL TSC1A	960404	UNIVAR108	230414
STRMAN4	580302	TEMCO 11A	890402	UNIVAR108	230418
STRMAN4	580308	TEMCO 11A	890404	UNIVAR108	230418



TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL  
CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
UNIVAR415	420104	WACO	BSO	601204	WACO YK 800834
UNIVAR415	420202	WACO	CRG	601001	WACO YK 800835
UNIVAR415	420204	WACO	CSO	601208	WACO YK 800838
UNIVAR415	420302	WACO	CTO	601214	WACO YMF 800412
UNIVAR415	420304	WACO	DSO	601208	WACO YOC 800822
UNIVAR415	420308	WACO	EGC	600810	WACO YOC 800824
UNIVAR415	420308	WACO	GC7	600808	WACO YPF 801802
UNIVAR415	420310	WACO	GXE	600702	WACO YPF 801806
UNIVAR415	420312	WACO	INF	600418	WACO YPF 801808
UNIVAR415	420314	WACO	JC	600802	WACO YPF 801810
UNIVAR415	420316	WACO	JC	600808	WACO ZGC 800809
UNIVAR415	420318	WACO	JYM	601504	WACO ZGC8 800804
UNIVAR415	420320	WACO	KNF	600418	WESTLD30 850180
UNIVAR415	420322	WACO	P	600302	WHITE D25 670102
UNIVAR415	420324	WACO	P	600402	WING D1 690302
UNIVAR415	420326	WACO	Q	600408	WINDKR AC7 720209
UNIVAR415	420328	WACO	Q	600504	WSK M18 810102
UNIVAR415	420330	WACO	Q	601210	WTHRLY201 830404
UNIVAR415	420332	WACO	QC8	600840	WTHRLY201 830406
UNIVAR415	420334	WACO	QC8	600842	WTHRLY201 830408
UNIVAR415	420336	WACO	QC8	600844	WTHRLY201 830410
UNIVAR415	420338	WACO	QC8	600846	WTHRLY820 830802
UNIVAR415	420402	WACO	QC8	600848	WTHRLY820 830804
UNIVAR415	420406	WACO	R	600304	ZENITH26 950102
UNIVAR415	420502	WACO	R	600422	ZLIN 526 970212
UNIVAR415	420504	WACO	RE	600902	ZLIN 526 970222
UNIVAR415	420702	WACO	RE	600906	
UNIVAR415	420722	WACO	RE	600910	
UNIVAR415	540102	WACO	RPT	600340	
UNIVAR415	540104	WACO	S3HD	601102	
UNIVAR415	872014	WACO	U	600306	
UNIVAR415	872018	WACO	U	600404	
VARGA 2150	840202	WACO	U	600405	
VARGA 2150	940204	WACO	U	600508	
VARGA 2150	350102	WACO	U	600510	
VARGA 2180	350104	WACO	UC	600882	
VARGA 2180	350105	WACO	UC	600884	
VICKER745	470204	WACO	UKC	600808	
VICKER745	470402	WACO	UKC	600810	
VICKER745	470404	WACO	UKC	600820	
VICKER745	470602	WACO	UKC	600822	
VIKINGB	520102	WACO	UKS	600824	
VIKINGB	520104	WACO	UKS	600826	
VIZOLAA21	870101	WACO	UKS	600830	
VLGTBWSAGITA	550201	WACO	UMF	600410	
VOUGHTF4U	152608	WACO	UPF7	601302	
WACO 125	600202	WACO	UPF7	601304	
WACO 9	600102	WACO	YK	600818	
WACO AGC8	600802	WACO	YK	600818	
WACO ASO	601202	WACO	YK	600832	
WACO ATO	601212				
WACO AVN8	601402				

**APPENDIX E**  
**SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES**

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) ENGINE GROUP NAMES AND THE FAA ENGINE MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN THE ENGINE STATISTICS TABLE IN THE BODY OF THIS REPORT.

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA
ALLSN 250B	03003	FRNKLN8V8245	27036	PIGMAN5	37002
ALLSN 250C	03002	FRNKLN8VS335	27040	PORSCH8784	51001
ALLSN 250C	03011	GE CF8	30020	PWA JFTD12	52047
ALLSN 250C	03013	GE CF700	30010	PWA JT12	52042
ALLSN 501D	03004	GE CJ810	30002	PWA JT15	52060
ALLSN 501D	03008	GE CJ810	30006	PWA JT15	52112
AMES TRS	04501	GE CJ805	30004	PWA JT3C	52038
AMTRMCMCCULH	42501	GE CJ805F	30005	PWA JT3D	52039
ARSRCHTFE731	01518	GE CT58	30001	PWA JT4	52037
ARSRCHTPE331	01502	GE CT58	30008	PWA JT8	52044
ARSRCHTPE331	01508	GE CT7	30030	PWA JT8	52046
ARSRCHTPE331	01508	GLADENK5	37503	PWA JT8	52048
ARSRCHTPE331	01510	GLADENR5	37504	PWA JT8	52049
ARSRCHTPE331	01512	GULF R870	31701	PWA JT8	52051
ARSRCHTSE331	01505	JACOBPR755	35006	PWA JT9	52050
BRSDLYGIPSY	20003	JACOBPR755	35007	PWA PT8	52043
CFMINTCFM58	13802	JACOBPR755	35008	PWA PT6	52053
CONT 8285	17038	JACOBSR755	35003	PWA PT8T	52045
CONT 975	17037	JACOBSR915	35005	PWA R1340	52009
CONT A40	17001	LYC 0540	41532	PWA R1340	52010
CONT A50	17002	LYC AL5512	41581	PWA R1340	52012
CONT A85	17003	LYC LTS101	41560	PWA R1340	52018
CONT A75	17005	LYC 0145	41501	PWA R1890	52001
CONT A80	17006	LYC 0145	41502	PWA R1830	52017
CONT C125	17011	LYC 0145	41503	PWA R1830	52018
CONT C145	17012	LYC 0235	41505	PWA R1830	52019
CONT C85	17008	LYC 0280	41506	PWA R1830	52020
CONT C90	17009	LYC 0320	41500	PWA R2000	52021
CONT E185	17013	LYC 0320	41508	PWA R2000	52023
CONT E185	17014	LYC 0320	41509	PWA R2800	52024
CONT E225	17015	LYC 0340	41510	PWA R2800	52025
CONT 0200	17020	LYC 0360	41511	PWA R2800	52026
CONT 0300	17022	LYC 0360	41513	PWA R4360	52027
CONT 0300	17024	LYC 0360	41514	PWA R985	52008
CONT 0348	17033	LYC 0360	41515	PWA R985	52007
CONT 0360	17023	LYC 0360	41522	PWA R985	52008
CONT 0360	17025	LYC 0360	41524	PWA T34	52055
CONT 0470	17026	LYC 0435	41518	RROYCEDART	54503
CONT 0470	17027	LYC 0435	41517	RROYCEDART	54504
CONT 0470	17028	LYC 0435	41518	RROYCEDART	54505
CONT 0470	17029	LYC 0435	41519	RROYCEDART	54506
CONT 0520	17032	LYC 0435	41520	RROYCEDART	54507
CONT 0520	17035	LYC 0435	41521	RROYCEDART	54508
CONT 0520	17040	LYC 0435	41523	RROYCEDART	54509
CONT 0526	17030	LYC 0435	41525	RROYCEGIPSY	20005
CONT R870	17018	LYC 0435	41526	RROYCEGIPSY	20006
CONT R870	17018	LYC 0480	41527	RROYCEGIPSY	20007
DHAVXXGIPSY	20004	LYC 0480	41529	RROYCETYN	54510
FCD 8410	28002	LYC 0540	41530	RROYCEVIPER	10201
FCD 8440	28003	LYC 0540	41531		
FRNKLN4A235	27011	LYC 0540	41533		
FRNKLN4AC150	27002	LYC 0540	41534		
FRNKLN4AC150	27003	LYC 0540	41535		
FRNKLN4AC150	27004	LYC 0540	41538		
FRNKLN4AC171	27005	LYC 0541	41536		
FRNKLN4AC176	27006	LYC 0541	41539		
FRNKLN4AC178	27007	LYC 0720	41548		
FRNKLN4AC199	27008	LYC R880	41540		
FRNKLN4AC199	27009	LYC R880	41541		
FRNKLN4AC199	27010	LYC R880	41542		
FRNKLN8A4150	27024	LYC R880	41543		
FRNKLN8A4185	27025	LYC R880	41544		
FRNKLN8A4200	27027	LYC R880	41545		
FRNKLN8A8215	27030	LYC T53	41552		
FRNKLN8AG4	27026	LYC T55	41555		
FRNKLN8AV335	27020	MNASCOC4	43504		
FRNKLN8AV350	27043	ONAN B48	99999		
FRNKLN8V4	27033	PCKARDV1850	49001		

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